

# **Service Manual**

## **DLP Digital Projector**

**Model Name : EP774/TX774**



Revision	Description	Date
00	Preliminary	06/01/2007
01	Specification(Contrast Ratio & Brightness) revised (Pg5) Spare parts list revised (Pg70—Pg72) The views of the IO label revised (Pg9)	06/13/2007

## CONTENTS

1.COMPLIANCE OF SAFE REPAIR.....	4
1-1.Cautions During Disassembling And Assembling.....	4
1-2.Lamp.....	4
1-3.Lens.....	4
2.SPECIFICATIONS.....	5
2-1.Product Specifications.....	5
2-2.Input/output connectors.....	9
2-3.Description of Wire Connection.....	10
2-3-1 Accessories List .....	10
2-3-2 Accessories Wire Description .....	10
2-4.Remote Control keypad.....	13
2-5. Control Key Pad and LED.....	14
2-6.BLOCK DIAGRAM.....	15
3.TROUBLE SHOOTING.....	16
4.DISASSEMBLY AND ASSEMBLY.....	20
5.Firmware.....	28
5-1.Projector USB Drivers Installation Guide.....	28
5-2.DLP Projector Flash-Tool (firmware) User Guide.....	37
5-3.DLP Projector Flash-Tool (splash logo) User Guide.....	42
5-4.How user can reset lamp hours .....	48
5-5.Check Lamp hours information in Service mode (J4P Series).....	49
5-6.Overscan rate.....	50
5-7.DLP Projector security.....	52
5-8.DLP Projector security unlock (Optoma EP774 series).....	54
6.How To Program By RS232.....	57
7.SERVICE NOTE.....	65
7-1.Cleaning.....	65
7-2.Remote Control For Battery Replacement.....	66
7-3.Power & READY LED Blink Code Message.....	67
7-4.Factory Preset Display Modes.....	68
7-5.OPTOMA Splash LOGO screen.....	69
7-6.Spare parts list .....	70
7-7.Carton.....	75

# 1. COMPLIANCE OF SAFE REPAIR

Be sure to read this Service Manual before providing services. In the projector, full consideration is taken to ensure the safety for a fire, electric shock, injury, harmful radiation, and substance. Therefore, observe the notice described in this Service Manual so that the safety is kept when providing services. Moreover, be sure to observe the notice described in the Instruction Manual.

Pay attention to the following during service inspection.

## 1-1. Cautions during disassembling and assembling

1. This equipment contains parts under high voltage. When making repairs, etc. Be sure to pull out the power plug beforehand to insure safety.
2. Parts may be very hot immediately after use. Make sure the equipment has cooled off sufficiently before carrying out repairs.
3. Make sure that parts and screws and wiring, etc. are returned to their original positions. Tube, tape and other insulation materials have been used for safety reasons. The internal wiring has been designed to avoid direct contact with hot parts or parts under high voltage when using clamps or other tools.
4. The parts used in this device have special safety features such as flame-resistance and anti-voltage properties. When replacing parts, always use parts supplied from the factory.
5. After finishing operations make sure that all parts and wires have been returned to their original position and that there has been no deterioration of the area around the location that was worked on.
6. Be sure to use an earth band (wrist band) during repair and inspection.

## 1-2. Lamp

During current conduction, the lamp is in the high-temperature state. In this case, pay careful attention because a high voltage is used. When replacing a lamp, replace it after confirming that the lamp has gotten cold sufficiently.

## 1-3. Lens

Do not look through a lens during projection. This damages your eyes.

## 2. SPECIFICATIONS

### 2-1. Summary Specifications

Design Specification		"TI" DMD, 0.7" x 1, 12° , XGA
Technology		DDR DLP with DDP2000
Engine System		Delta non-telecentric optical engine J4P
Resolution	Native	XGA 1024x768 Native
	Compatibility	Up to SXGA 1280x 1024 @ 75 Hz <140MHz >
Contrast Ratio*	Typical	<b>2100:1</b>
	Minimum	<b>1900:1</b>
Brightness*	Typical/Minimum (Standard mode)	<b>3500/3200 ANSI Lumens</b>
	Typical/Minimum (ECO mode)	<b>2800 /2500ANSI Lumens</b>
Brightness Uniformity	Typical	80%
	Minimum	70%
	Test Method	average 4 corners / center at 9 points
Color Reproduction		24 bit, 16.7million True Color
Color Temperature @ normal		6000K
Color Wheel		5-Segment, RYGBW (2x) R/G/B/W/Y :82/80/78/91/29 44mm
Projection Lens		Manual Zoom and Focus
Digital Zoom		yes
Zoom Ratio		1.15:1
Projection Distance		1m to 11.2m
Projection Screen Size (diagonal)		23.4"~300"
Projection Method		Front/Rear, Desktop/Ceiling (Rear, Front)
Throw Ratio	Distance/Screen Width	1.8(Wide) - 2.1(Tele)
Effective Focal length		26.01 ~ 29.84mm; 2m @54"
Image Distortion		+/- 1 % max
Optical Offset		124%
Aspect Ratio		4:3 & 16:9

\* Note: DELTA will confirm the final figure after 1st MP shipment

Keystone Correction		+/- 15°(Angle from optical axis)
Frequency	H-Sync	15, 31~90KHz
	V-Sync	50 - 85 Hz
Compatibility	RGB Digital	VESA 640x480@60/72/75 Hz
		VESA 640x480@ 85Hz
		VESA 800x600@56/60/72/75/85Hz
		VESA 1024x768@ 60/70/75/85 Hz
		VESA 1280x1024@ 60Hz
	RGB Analog	VESA 1024x768@85/75/72/70/60 Hz
		VESA 800x600@85/75/72/60/56 Hz
		VESA 640x480@85/75/72/60 Hz
		VESA 1280x1024@60 Hz
		Super VGA, VGA
	Macintosh	Macintosh (13", 16" , 19" )
		Power Mac
	SDTV	480i,576i (thru RGB HD-15)
	EDTV	480p (thru RGB HD-15)
	HDTV	576i,720p,1080i (thru RGB HD-15 )
	Video	NTSC/NTSC 4.43, PAL( B/G/H/I/M/N 60), SECAM
Lamp	Type	Osram E20.6
	Standard mode	280W
	ECO Mode	230W
	Lamp Life for Standard mode	2000 hours
	Lamp Life for ECO mode	3000 hours
	Survival Rate	50%0
Thermal	Fan Number	4
	Acoustic Noise (normal)	Typical 36dB / max 37dB
	Acoustic Noise (ECO)	Typical 33dB / max 34dB

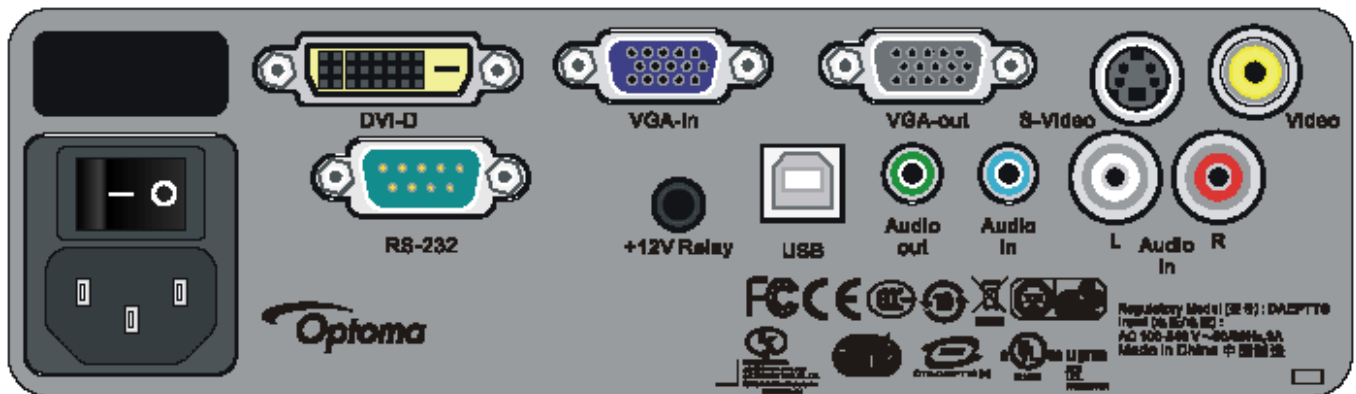
Power Supply & Consumption	Power Switch	Yes
	Voltage(auto-ranging)	Typical @ 110Vac
	Standard mode	350W
	ECO Mode	230W
	Standby (watts)	<5W
	Auto-Ranging Function	Yes
	Power Factor Correction	Yes
ID Design	Material	Plastic
	Ceiling Mount	Yes & with tripod mount
	Handle	NA
	Adjustment Leg	Yes, 1 at front center, 9 degree (-1~3 degree tilt adjustable at side)
	Dimensions (WxDxH)	11.81" x 9.61" x 3.95" (300mm x 244mm x 100.5mm)
	Net Weight (Projector Only)	3.7Kg ( ≤8.2 lbs)
	Gross Weight	6.6Kg( ≤14.6 lbs)
	Security Lock	Kensington Lock
Safety & Regulatory Compliance		FCC-B / UL / c-UL / TUV / CB / CE / CCC / ICES-003 (class B) / eK, CCC, China RoHS
Key Pad Function		Yes
Key Pad Definition	Back Light Design	NA
	Power	V
	Ez Key/Quick Menu	NA
	Auto	V
	Source	V
	Keystone	V (share with up/down)
	Menu	V
	Enter	V
	Volume (-/+)	V (share with left/right)
	Arrow Key +/-up/down	V
LED Indicator Design		Yes
LED Define/Color	Power	Green
	Lamp Standby	Orange(Amber)
	Over Temperature	NA

INPUT Terminals	Data input -I	DVI-I connector accept DVI-D signal
	Data input -II	RGB HD-15
	Video	Composite Video (RCA x 1)
	S-Video	S-Video (Mini DIN)
	Component	Yes, thru RGB HD-15
	HDMI Digital Video	DVI-D + HDCP
	Audio input - I (RCA R& L)	Yes
	Audio input -II (Mini Jack)	Yes (mini jack)
OUTPUT Terminals	Data output	RGB HD-15
	Audio Output	Yes (mini jack) -variable adjustment
Control Terminals	Control : USB	Yes (USB-B mouse + keypad emulation + Flash upgrade )
	Control: RS-232	Yes (Room Control)
	Screen Control	Yes, 12V
Build-in Speaker		3 w mono speaker (SPL <= 5W)
Plug & Project		EDID1.3, analog RGB & DVI-D (with HDCP)
On-Screen Display (OSD)		1.English      2.French    3.Spanish (Span) 4.German      5.Portuguese 6.Simplefied Chinese 7.Traditional Chinese 8.Italian      9. Norwegian, 10. Swedish 11. Dutch      12. Russian    13. Korean 14. Finnish    15. Greek      16. Danish 17. Polish
Environmental		
Temperature	Non-Operating	-10°C ~ 60°C
	Operating	5° ~ 40°C @ sea level
Altitude	Non-Operating	sea level to 40,000 feet
	Operating	sea level to 10,000 feet (@23C)
Humidity	Non-Operating	5% to 95%
	Operating	5% to 90% with maximum wet bulb temperature of +27°C



## 2-2 Input/output connectors

### EP774/TX774



RGB (Analog)	HD-15 x1(I/P), HD-15 x1(O/P),
DVI-D With HDCP	Yes
Video (CVBS)	Composite video (RCAx1)
S-Video (Y/C)	Mini-DIN
Component Video	VGA to Component thru (HD-15_RGB)
Audio in (Video)	Left/Right (RCA x2)
Audio in (PC)	Mini-phone jack (3.5mm)
Audio out(PC)	Mini-phone jack (3.5mm)
DC Power output 12v	Yes
Service/ Firmware upgrades	USB
Remote Mouse Control	USB
Serial Port(RS-232)	Yes
	N/A
	N/A
Security	Kensington slot

## 2-3. Description Of Wire Connection

### 2-3-1 Accessories List

1. AC Power Cord x 1 ( US 3.0M)
2. Computer Cable VGA to VGA (2.0m)
3. USB Cable, A to B (2.0m)
4. Composite cable RCA \* 1 (1.8m)
5. WEEE card
6. Remote Controller with laser pointer & batteries
7. QTG(10 language: English, French, German, Spanish, Italian, Portuguese, Russian, Simplified Chinese, Traditional Chinese, Korean
8. CD (Info file , cover artwork as DLP generic)
9. Carrying case with Optoma Logo
10. Lens cap (slide door design, Emboss Eyes Warning label, optoma's designed logo)
11. Warranty card
12. User's Manual in 18 language ( English, French, German, Italian, Spanish, Portuguese, Russian, Simplified Chinese, Traditional Chinese, Korean, Dutch, Swedish, Finnish, Greek, Danish, Norwegian, Polish, Arabic )(CD only)

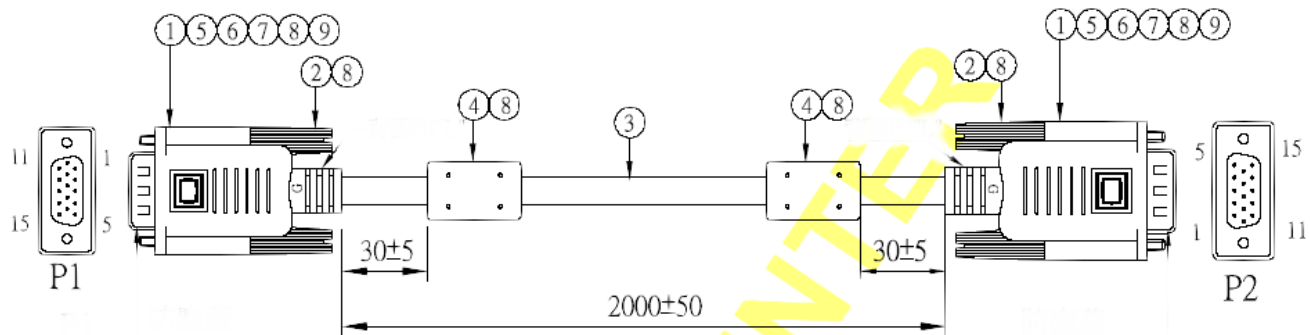
### 2-3-2 Accessories Wire Description

USB Cable (2.0m) 3080337300



SHELL	DRAIN	SHELL
4	BLACK	4
3	GREEN	3
2	WHITE	2
1	RED	1
J2	WIRE COLOR	J2
WIRE CONNECTION TABLE		

## CABLE SIGNAL D-SUB D-SUB L2000 BLK (RGB CABLE 2m) P/N : 3080425001



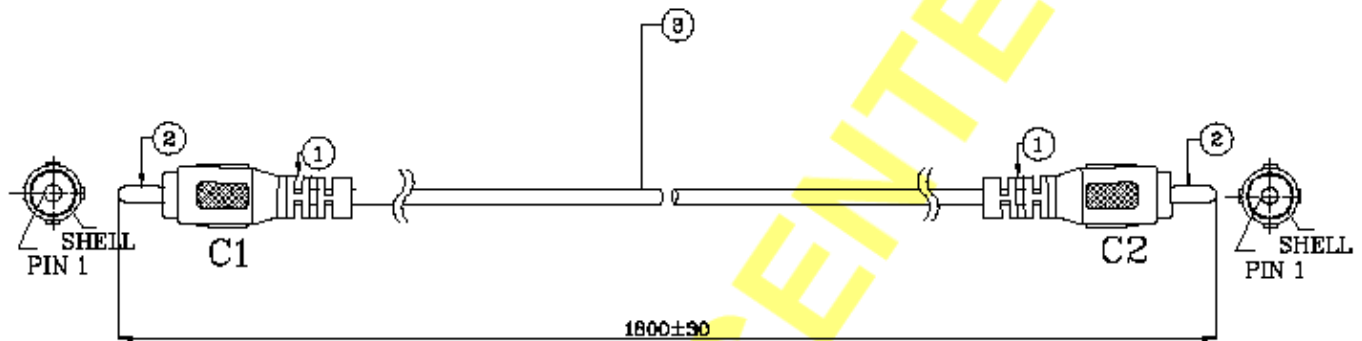
WIRING TABLE

P1	WIRE COLOR	P2
1	RED(COAX COND)	1
2	GRAY(COAX COND)	2
3	BLUE(COAX COND)	3
4	WHITE	4
5		5
11		11
6	RED(COAX SHIELD)	6
7	GRAY(COAX SHIELD)	7
8	BLUE(COAX SHIELD)	8
10	BROWN	10
12	YELLOW	12
13	ORANGE	13
14	GREEN	14
15	BLACK	15
CASE	BRAID SHIELD CASE	CASE

## \*\*MATERIAL LIST\*\*

NO.	MATERIAL	QTY
1	H.D CONN: 15P (3x5) MALE SOLDER TYPE BLACK PBT INSULATOR TIN PLATED BACK SHELL	2Set
2	SCREW: #4-40UNC-2A NICKEL PLATED (GTL-093)	2Set
3	CABLE: UL/CSA20276 (#30*1C+S)*3+#28*6C+AEB GTL-005 OD=6.0mm 3COAX: UL 1354 #28 (RED,GRAY,BLUE) 6C: (BLACK,YELLOW,ORANGE,WHITE,BROWN,GREEN)	1PC
4	CORE: $\phi$ 14.2*28.5* $\phi$ 7.0mm	2PCS
5	JUMP WIRE: UL 1061 #26 BLACK (L=40*3*15mm)	12PCS
6	META CAN: 9P $\phi$ 8.0 TIN PLATING	6PCS
7	PE	12g
8	PVC: BLUE (GTL-093) 45P	40g
	PVC: BLUE (GTL-093) 30P	2g*4
	PVC: BLACK (GTL-005) 45P	20g
9	COPPER-FOIL: W=5mm L=40mm	2PCS

## CABLE SIGNAL RCA RCA L1800 YEL (1.8m) P/N : 3080301101

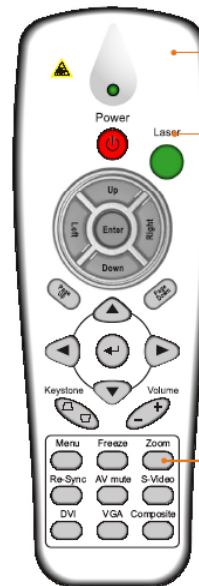


COMPONENT			UNIT	
AUDIO WIRE	No. OF AUDIO WIRE		EACH	1
	CONDUCTOR	CONSTITUTION		28AWG(7/36AWG(0.127MM))
		MATERIAL		TINNED STRANDED COPPER
		O.D.	MM	
	INSULATION	MATERIAL		FOAM PE
		THICKNESS	MM	0.25
		O.D.	MM	1.45 MIN.
		COLOR		WHITE (OPTIONAAL)
	BRAID SHIELD	CONSTITUTION		16/5/38AWG(0.10MM)
		MATERIAL		TINNER COPPER
		COVERAGE	%	85% MIN.
	AL/MYLAR (FACE OUTSIDE)	THICKNESS	MM	0.025
COVERAGE		%	100	
OVERLAP		%	25 MIN.	
JACKET	MATERIAL			PVC
	THICKNESS		MM	0.38 MIN.
	O.D.		MM	3.1±0.1
	COLOR			SEE TABLE
IMPEDANCE				75 OHMS AT 1M Hz
SAFETY				UL 1354
MARKING: (THE SURFACE PRINTING MUST BE INCLUDE)				(1) 93 AWM (2) FILE No. (3) MANUFACTURER NAME (4) UL STYLE 20276 (5) TEMPERATURE RATING: 80°C (6) VOLTAGE RATING: 30V (7) VW-1 (8) 28AWG (9) COLOR OF PRINTING – SEE TABLE

## 2-4. Remote Control Keypad

Remote Control Handset for EP774/TX774

Key	Function	Description
1	Power	Power on/off toggle
2	Laser	Laser pointer trigger, press to emit laser
3	Up	Up key for emulation of keyboard move
4	Left	Left key for emulation of keyboard move
5	Enter	Enter key for emulation of keyboard move
6	Right	Right key for emulation of keyboard move
7	Down	Down key for emulation of keyboard move
8	Page Up	Page Up key for emulation of keyboard
9	Up arrow	Up key for OSD menu
10	Page Down	Page Down key for emulation of keyboard
11	Left arrow	Left key for OSD menu
12	Enter	Enter key for OSD menu
13	Right arrow	Right key for OSD menu
14	Down arrow	Down key for OSD menu
15	Keystone +	Keystone correction increment
16	Keystone -	Keystone correction decrement
17	Volume -	Speaker volume decrement
18	Volume +	Speaker volume increment
19	Menu	OSD menu on/off
20	Status	Show status
21	Mute	Speaker mute toggle
22	Auto	Auto adjustment for phase, tracking, size, position
23	Blank	Display blank & Audio mute
24	Zoom +	Zoom in
25	Source	Input source selection
26	Freeze	Freeze video
27	Zoom -	Zoom out



Casing:  
W-0002(HP OOV WHITE 1)

Character:  
Pantone Cool Gray 11 C

Keypad:  
SW-0003(Platinum Silver)

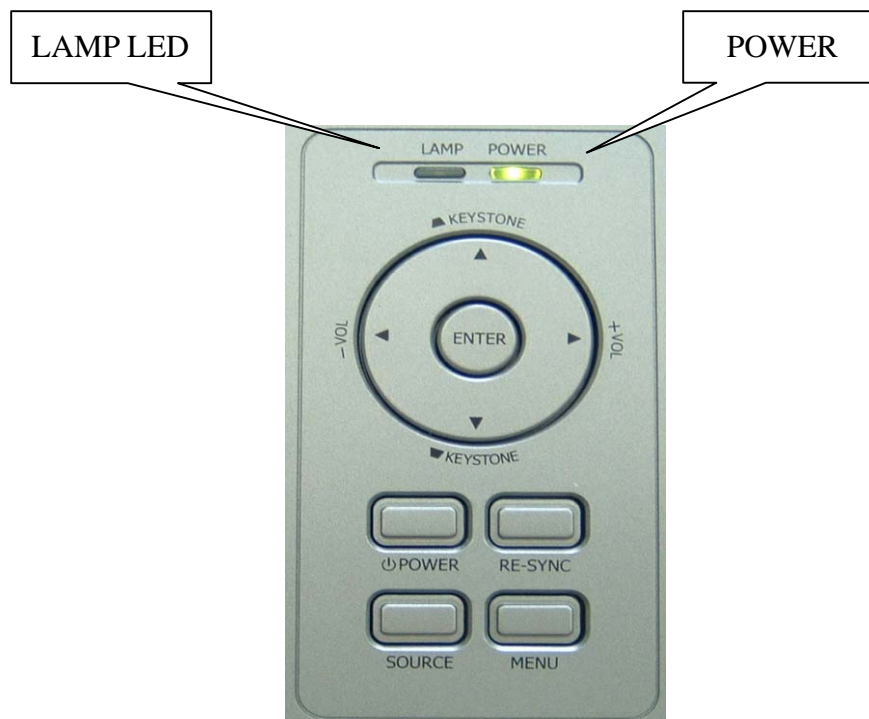


Casing:  
SW-0006(PS#TY-2996)

Character:  
Pantone Black C

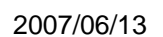
Keypad:  
SW-0003(Platinum Silver)

## 2-5. Control Key Pad and LED



Name	Usage
Power LED	Green: Power On Off : Power Off Blink : Error code
Lamp Ready LED	Orange: Lamp is ready to turn on/off Blink:Lamp not ready (warming up/shutting down & cooling)
Power	Lamp On/Off switch
Source	Source selection
Re-sync	Re-Sync image perfection
Menu	Menu On/Off switch
Keystone+ (Up)	Keystone + when OSD off Up selection when OSD on,
Keystone- (Down)	Keystone – when OSD off Down selection when OSD on,
Vol+ (Right)	Volume + when OSD off Right selection when OSD on
Vol- (Left)	Volume - when OSD off Left selection when OSD on

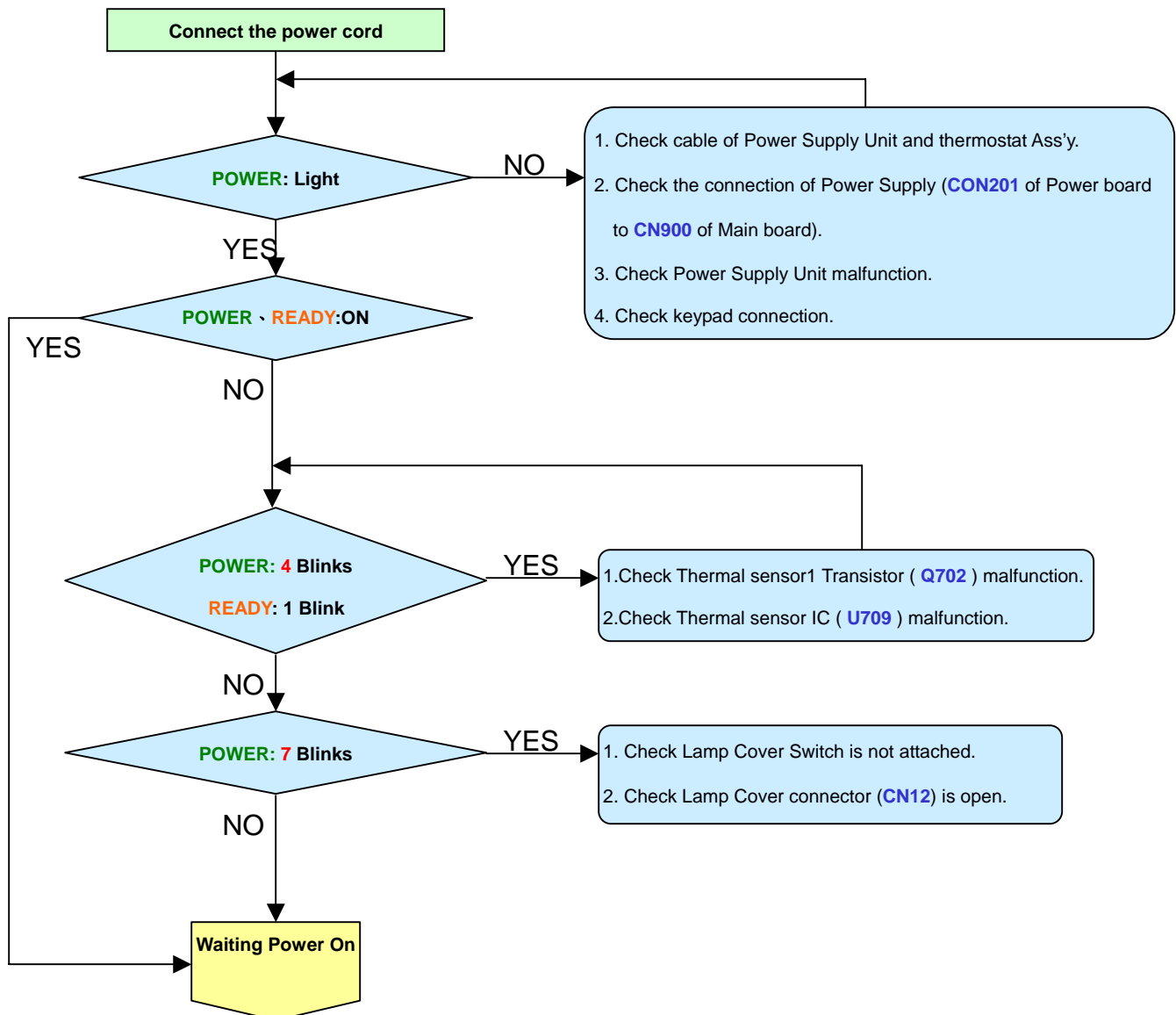
## OPTOMA EP774/TX774 Structure Diagram



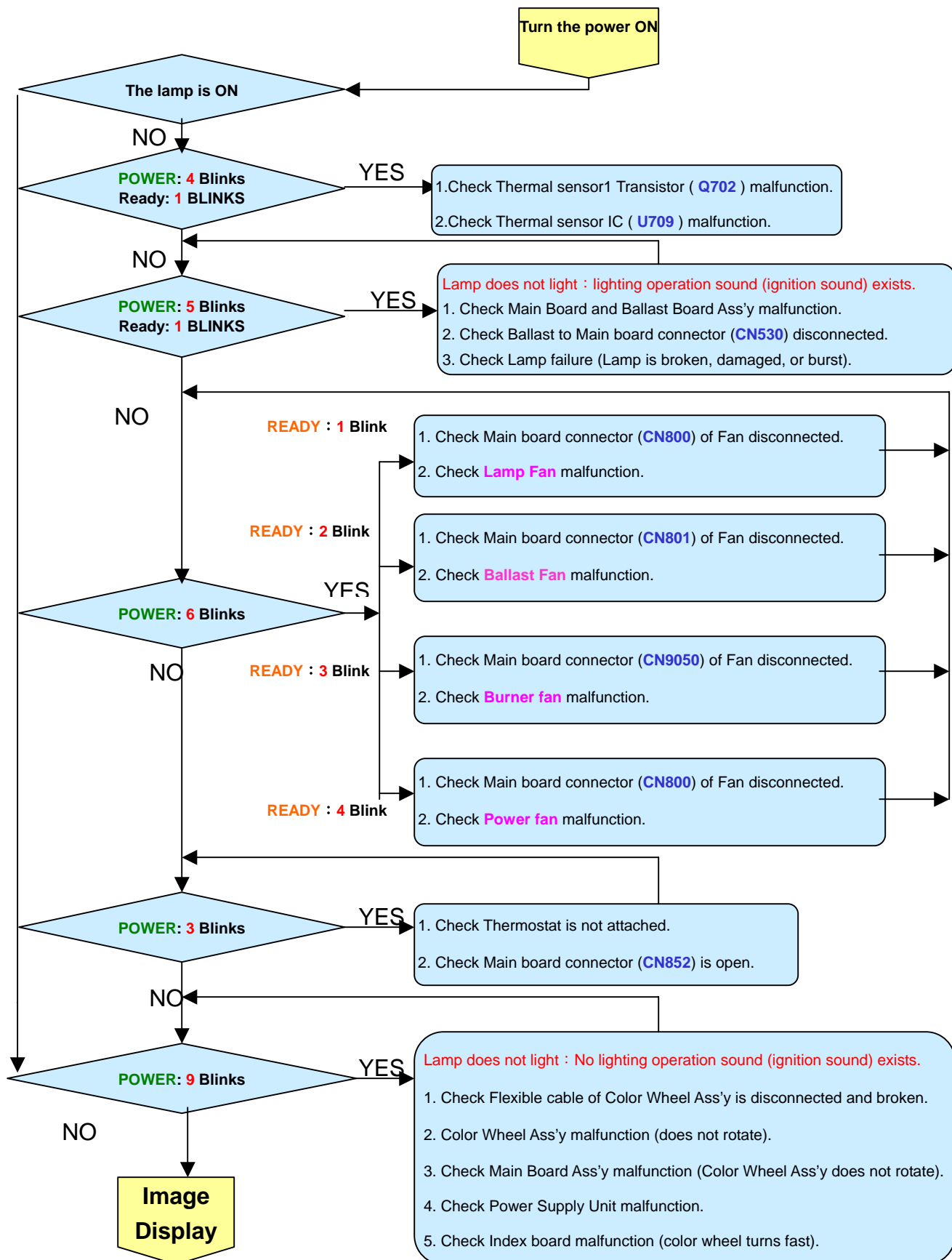
## 3. TROUBLE SHOOTING

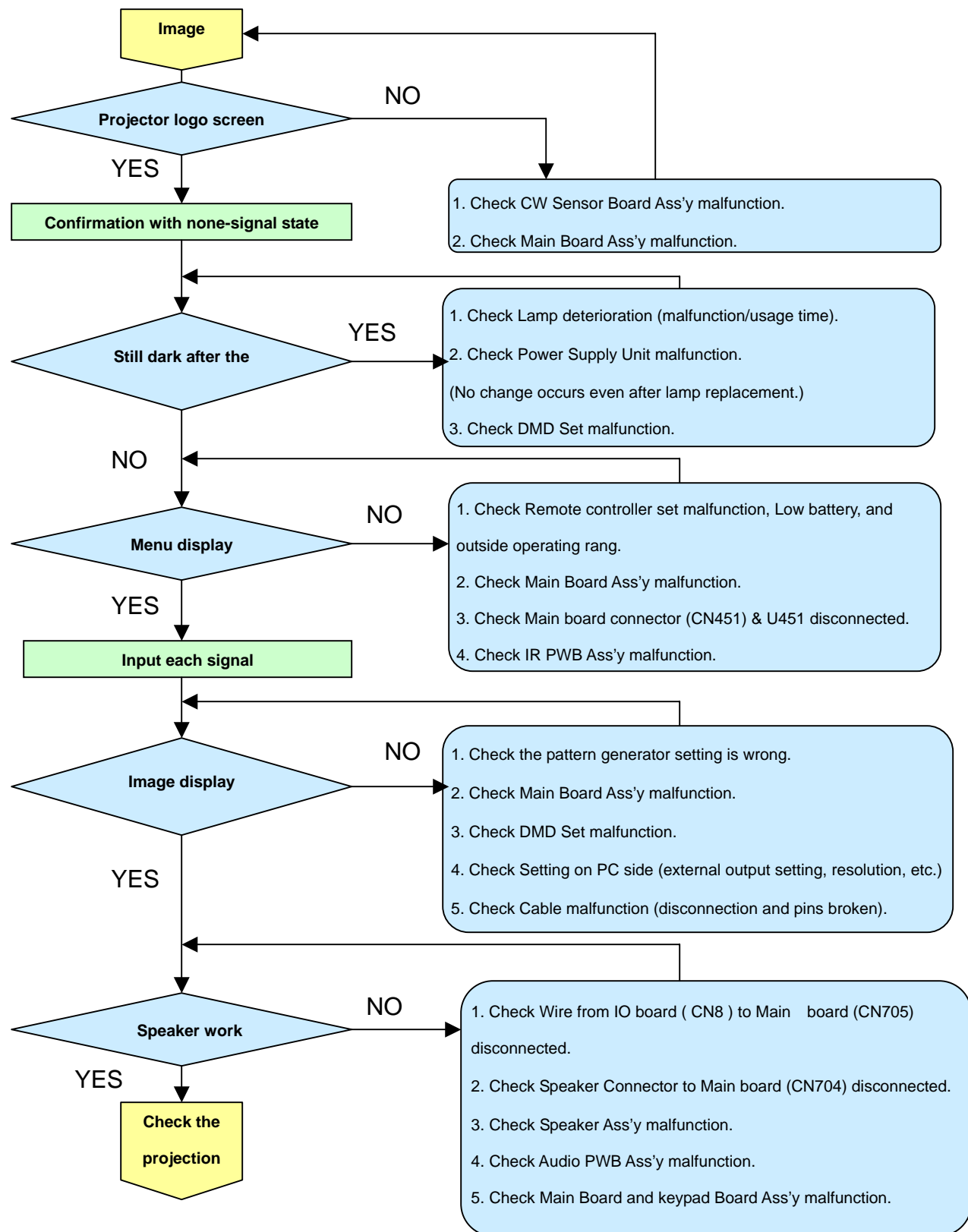
### J4P serial

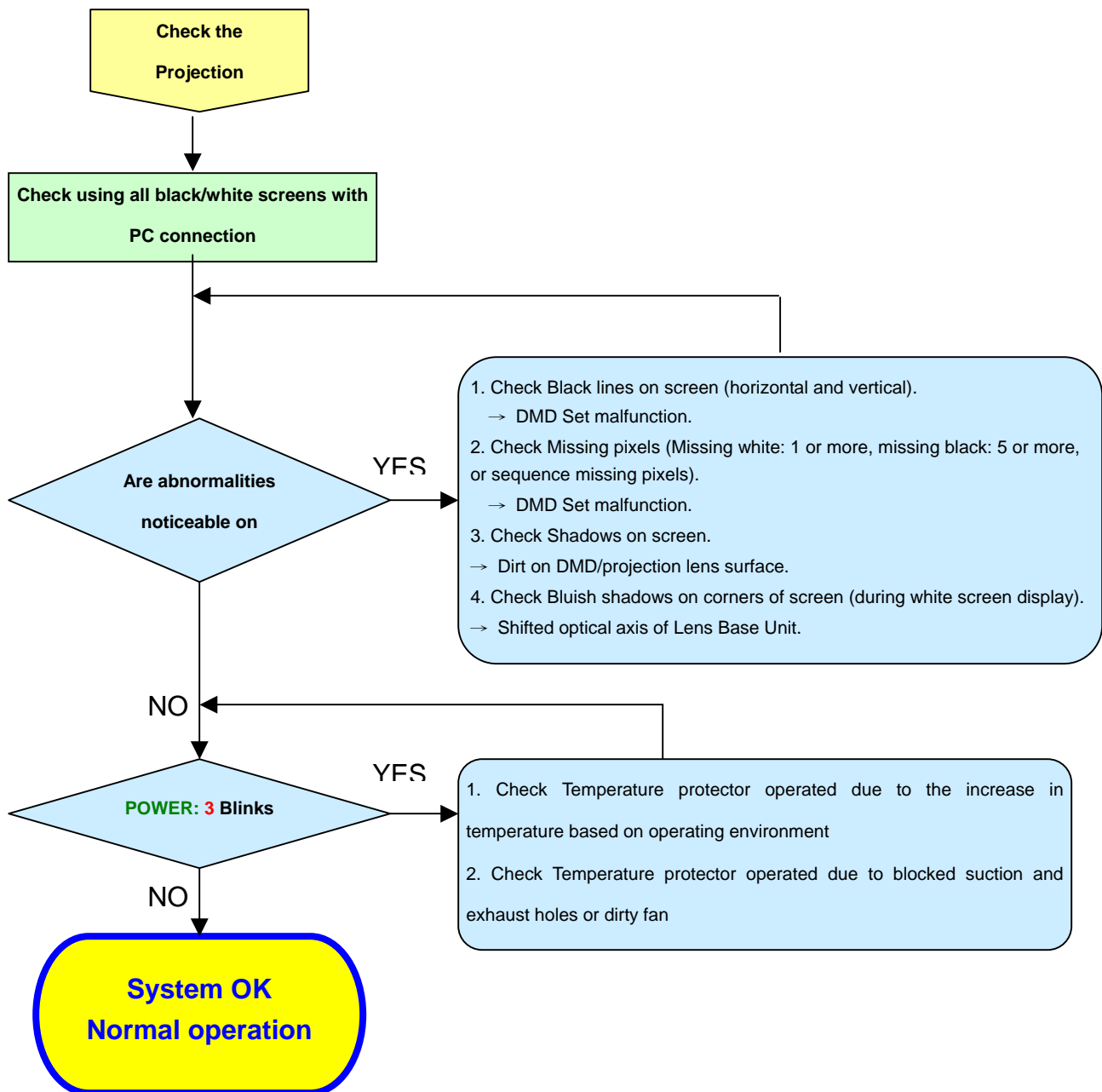
By checking operations during normal usage time, it is possible to carry out judgments on malfunction to a certain











## 4. DISASSEMBLY AND ASSEMBLY

### Removing the Lamp Module and Lamp Cover



Look at Top Case side



Loose the two screws.



Open the lamp cover



Loose the two screws and then take out the lamp module by the ring-pull.

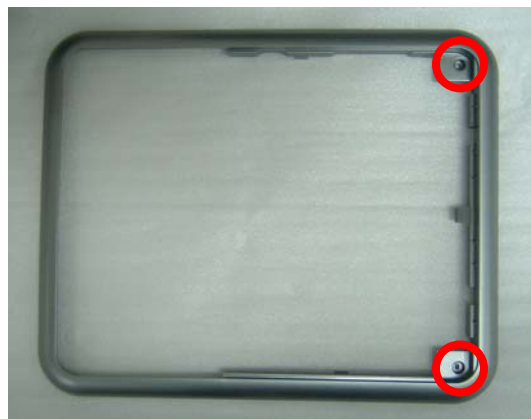
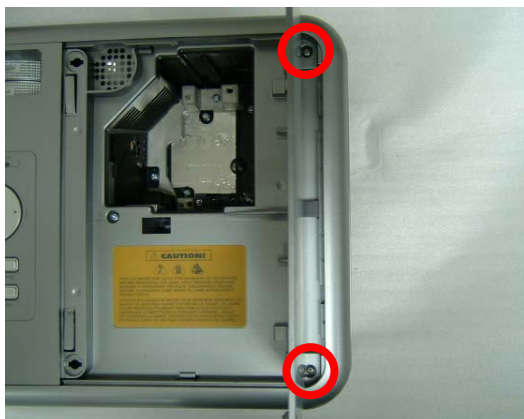


Lamp module views.



Lamp holder views.

## Removing the Top Cover



**Remove the two screws and take off the top case frame**



**Remove these the eight screws.**



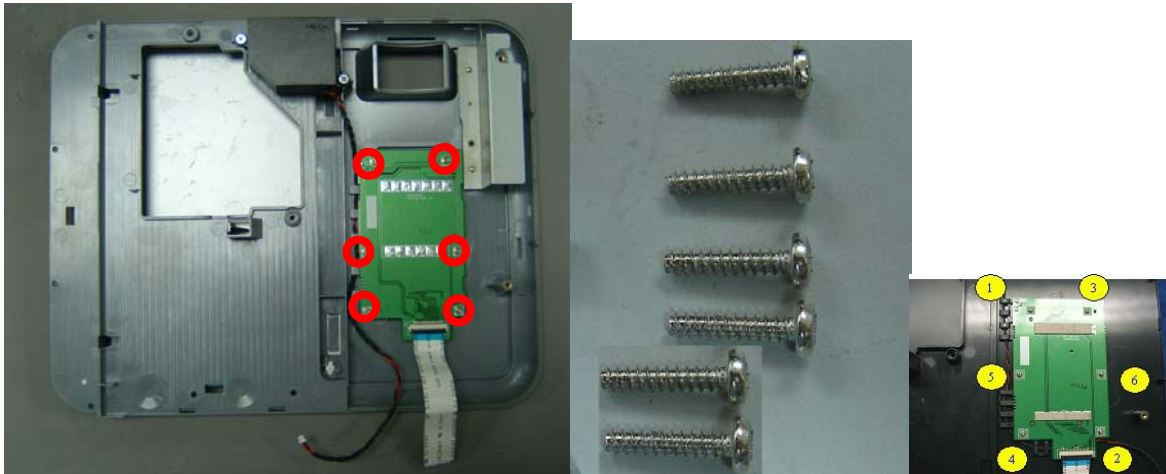
**Loose the two screws.**



**Then remove the top cover.**



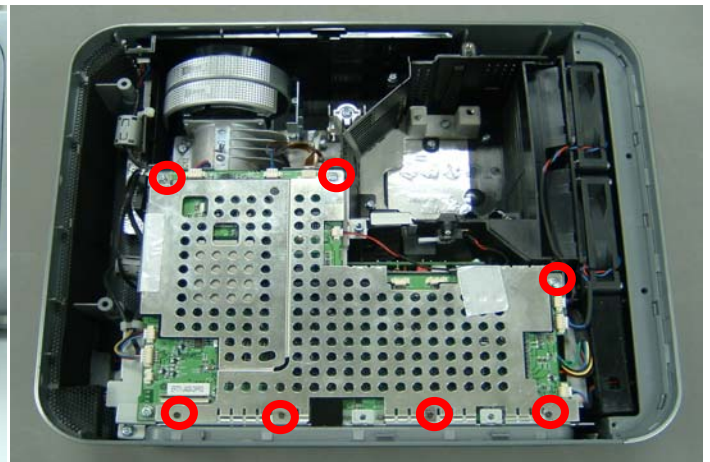
## Removing the KeyPad / Front Cover / Main Board



Remove these the six screws.



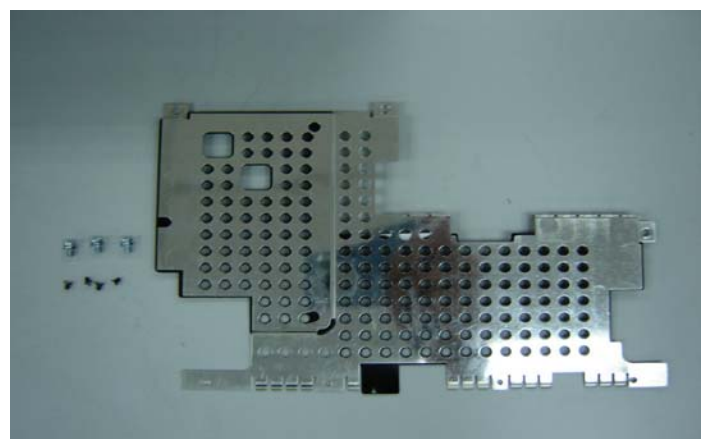
Remove these the six hexagonal bolts.



Remove these the seven screws.

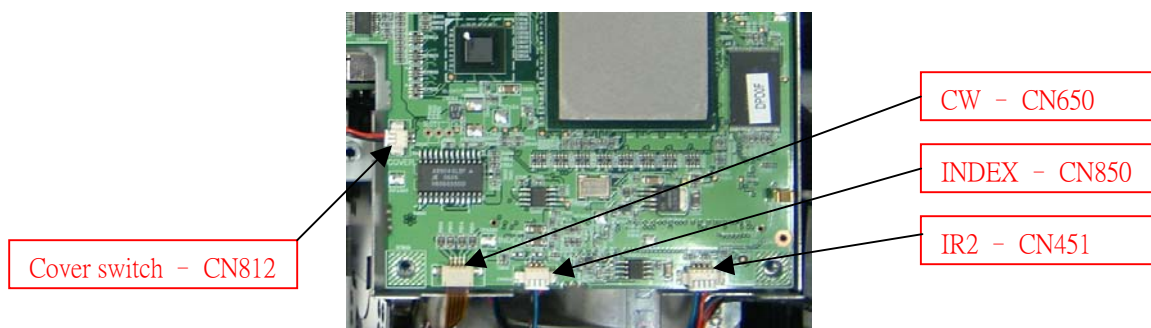
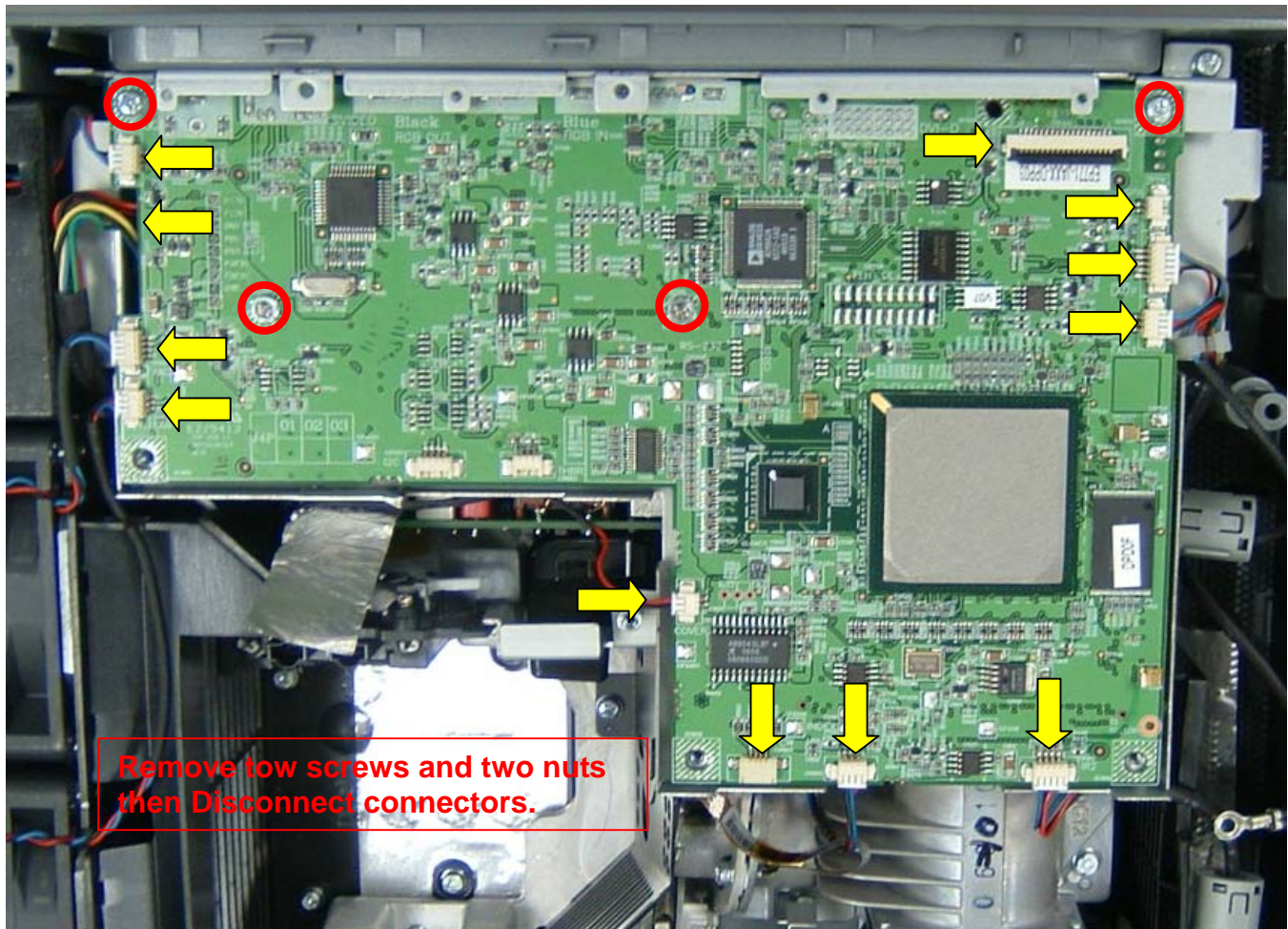
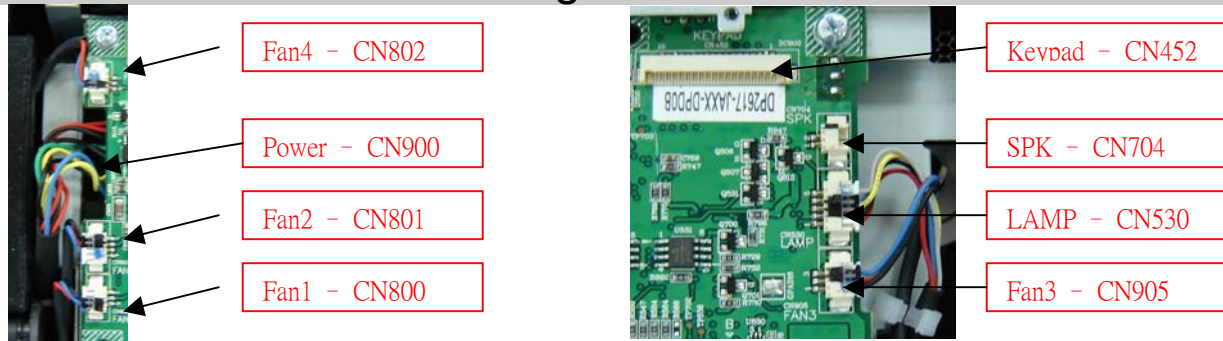


Seven screws.



Open the cover.

# Removing the Main Board

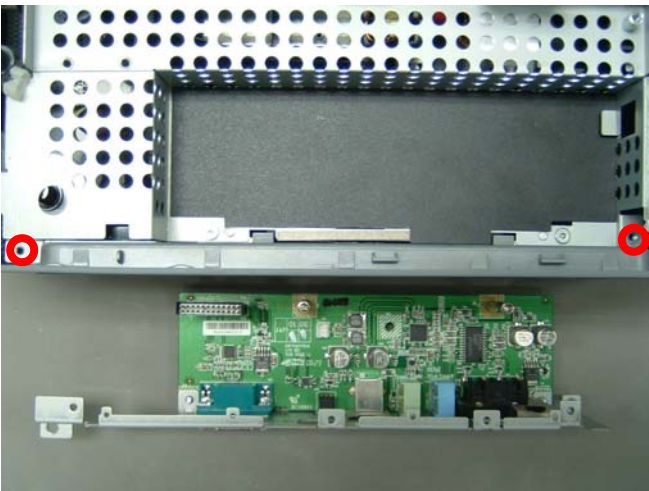




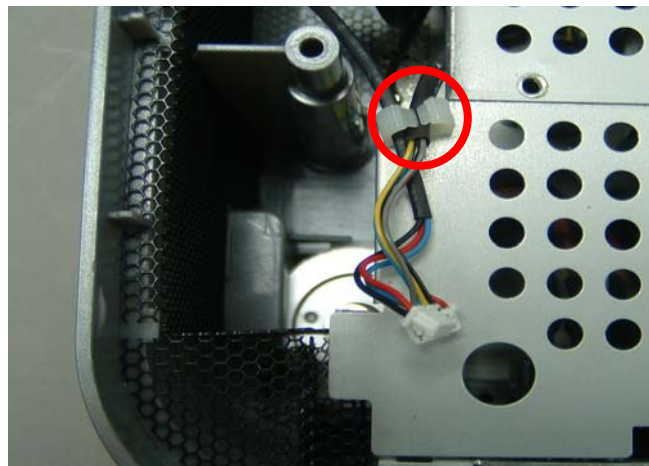
## Disassemble the IO Board



Disassemble the main board

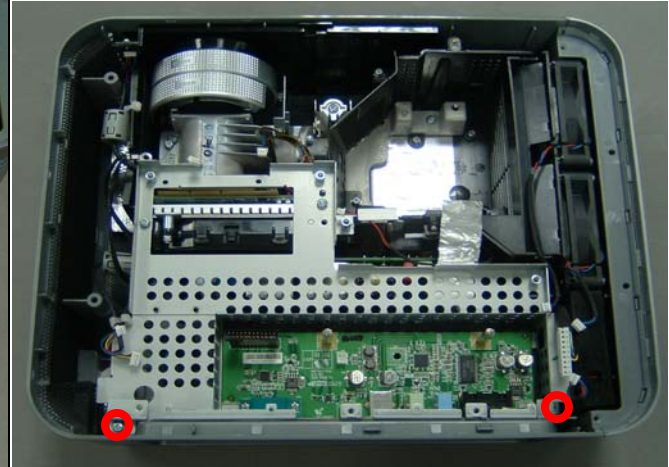


Remove the IO Board.

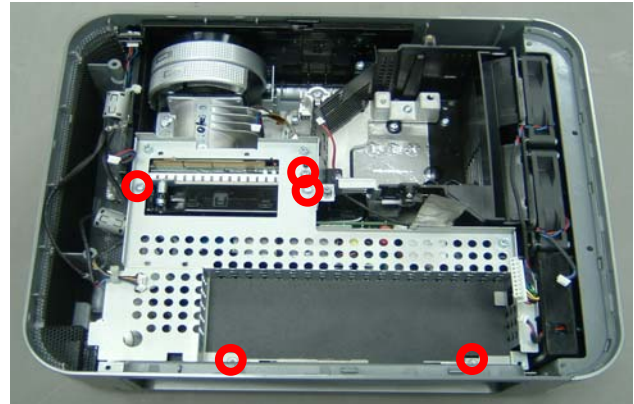


Check this place when you assemble the cover.

Company Confidential



Remove the two screws.



Remove these the five screws.



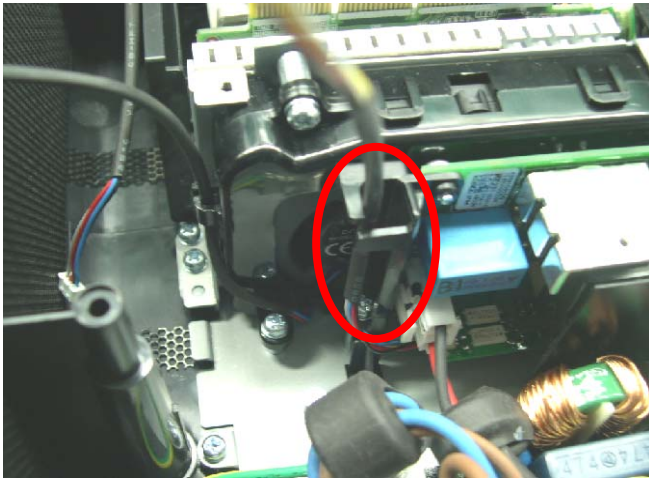
Remove the IO Case.

Optoma

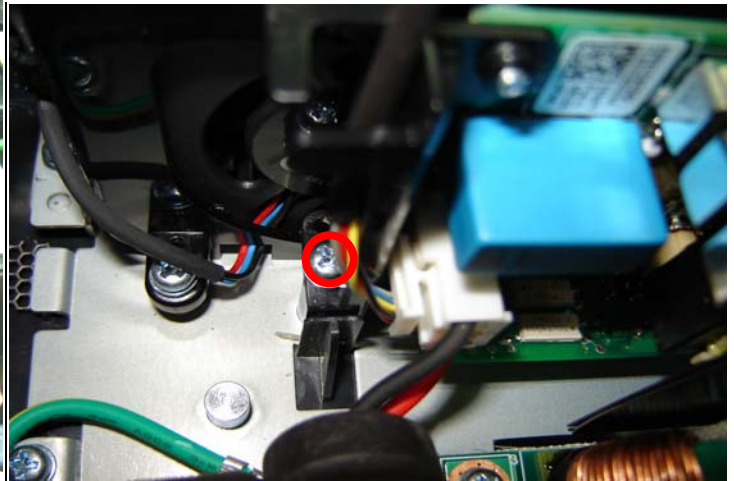
Delta



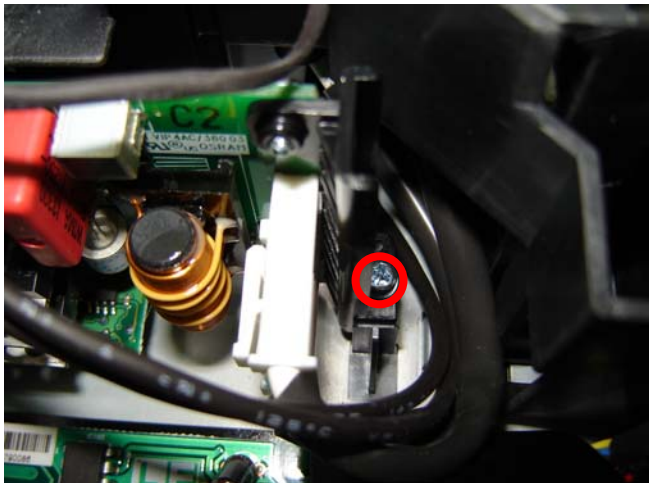
## Disassemble the Ballast and Fan Assy.



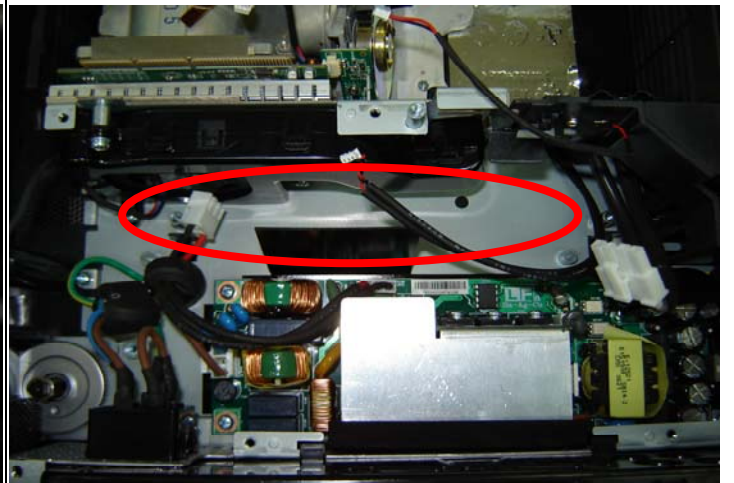
Check this place when you assemble the wire.



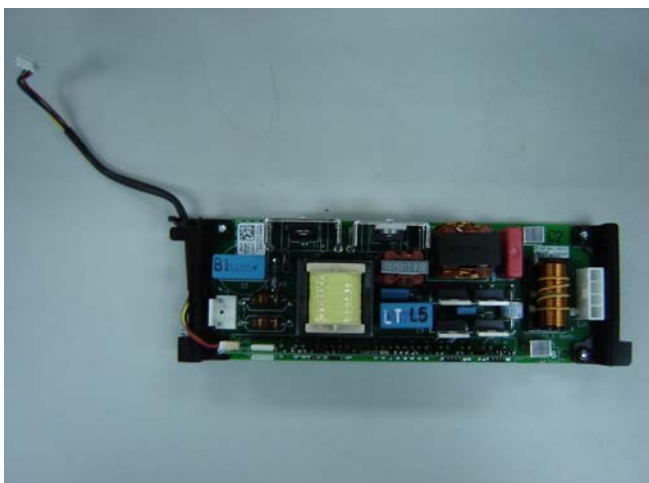
Remove this screw.



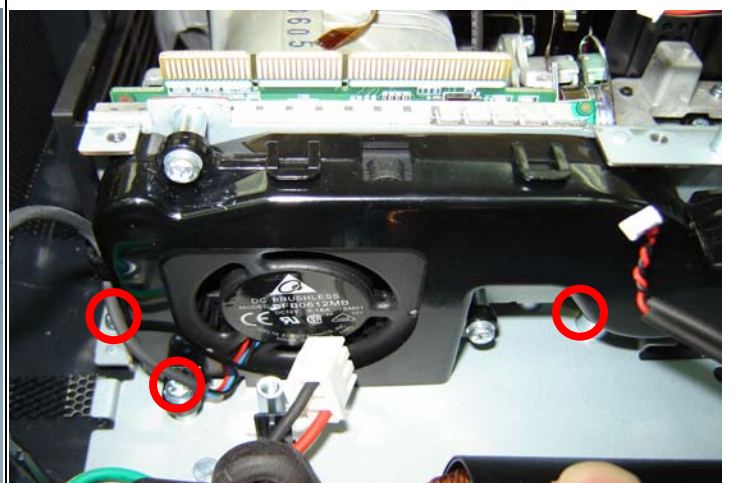
Remove this screw.



Remove the Power Supply.



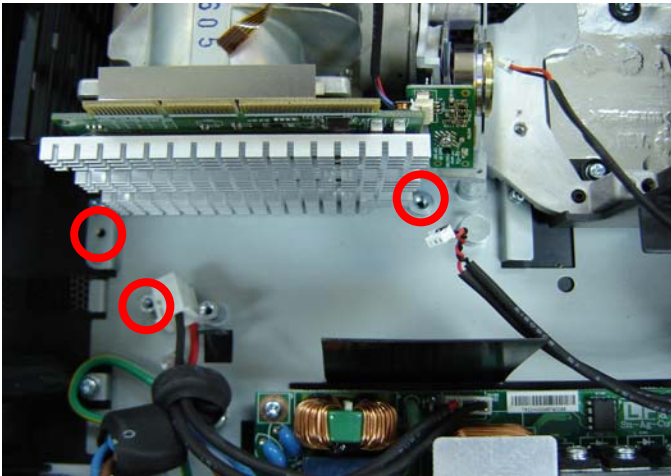
The Power Supply.



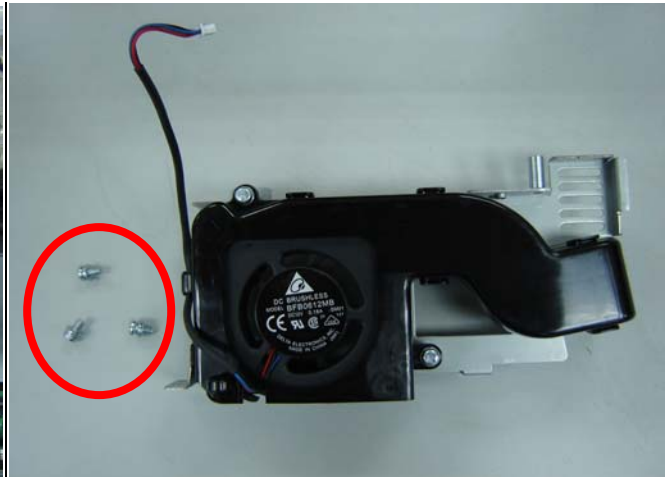
Remove these the three screws.



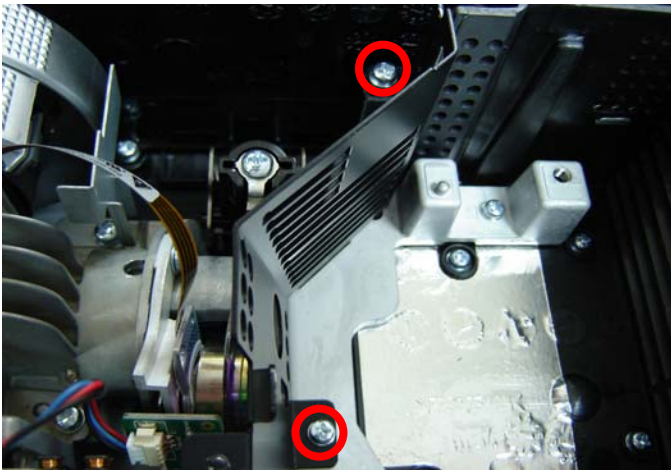
## Disassemble the Fan and Optic Engine Assy.



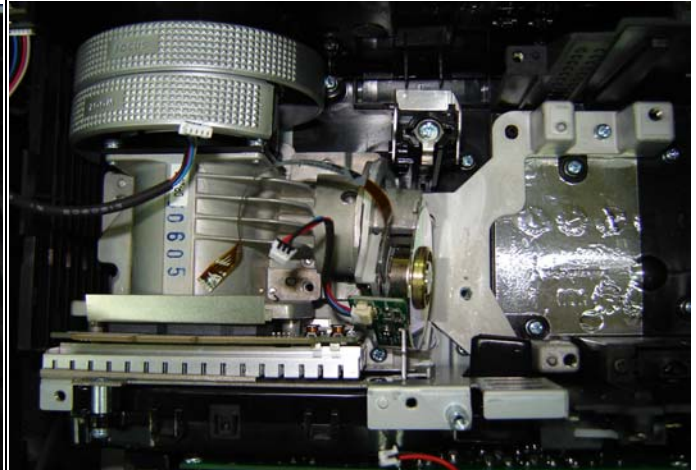
Remove the Fan.



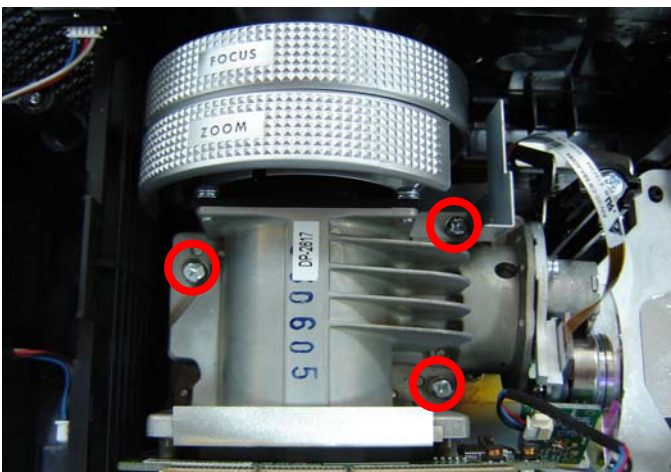
The Fan Module and screws.



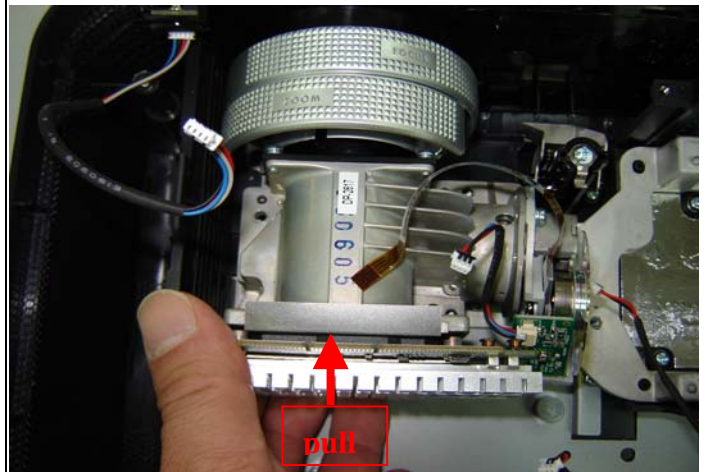
Remove these the two screws.



Take the heat-sink away.

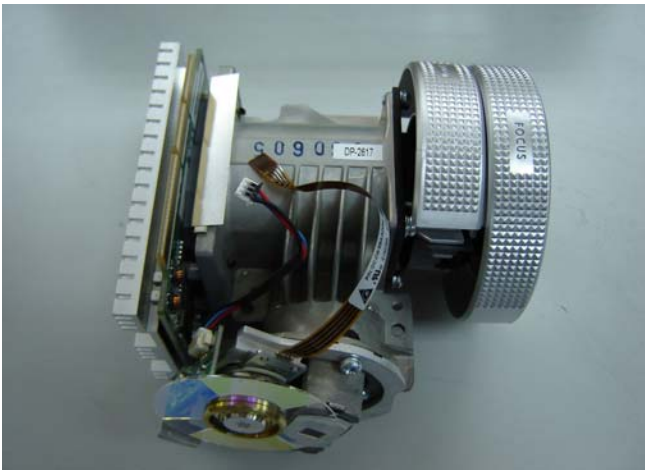


Remove these the three screws.



Remove Optic Engine Assy.

# Disassemble the Optic Engine Assy and Power Assy .



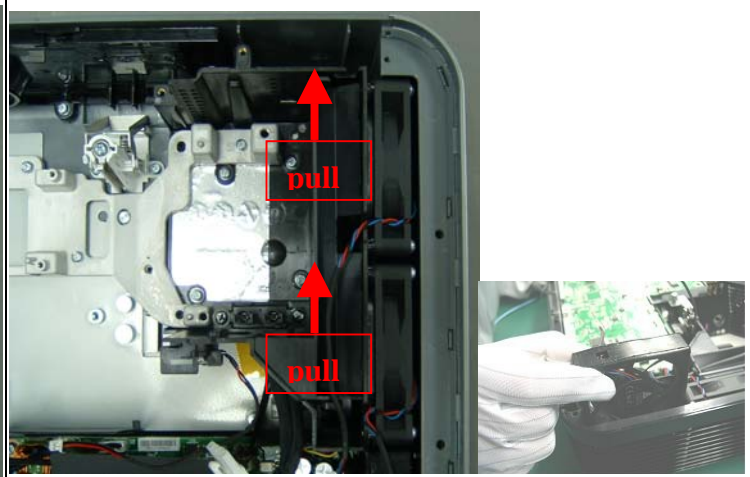
View Optic Engine Assy.



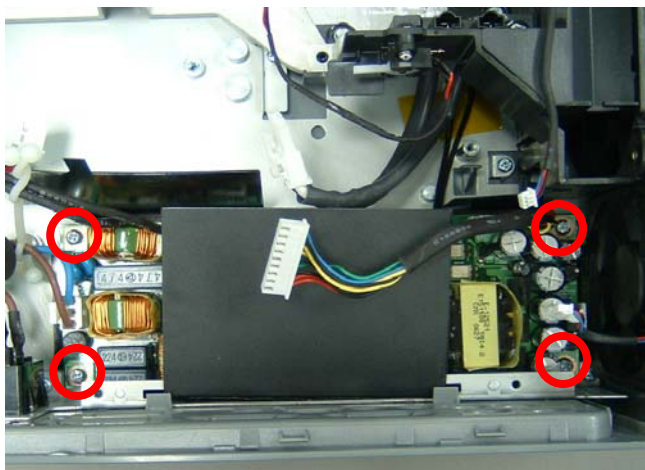
View Optic Engine Assy.



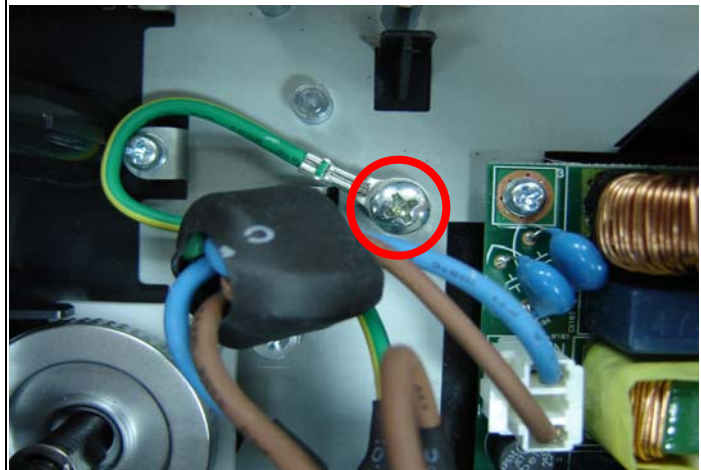
Remove Optic Engine Assy.



Remove the two Fan Assy.



Remove these the four screws.



Check this screw when you assemble the wire.



## 5. Firmware

### 5-1 Projector USB Drivers Installation Guide

Ver 5.0

#### System Requirement

IBM compatible PC.

Windows XP-SP2

Operator may need

#### NOTE:

The user must have administrative privileges on the target computer in order to install your driver. The installation target directory must not write protected.  
**Attention: This utility is for DDP2000/2030 series projector only.**

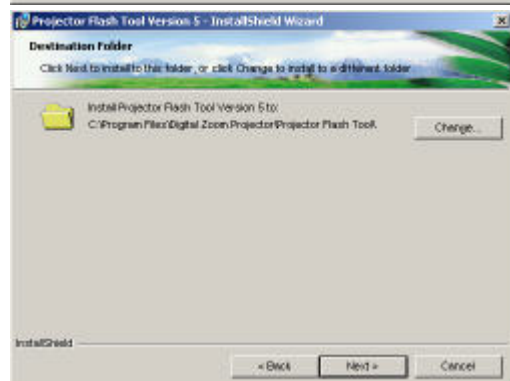
basic knowledge of Windows device installation.

#### Install Flash-Tool to PC

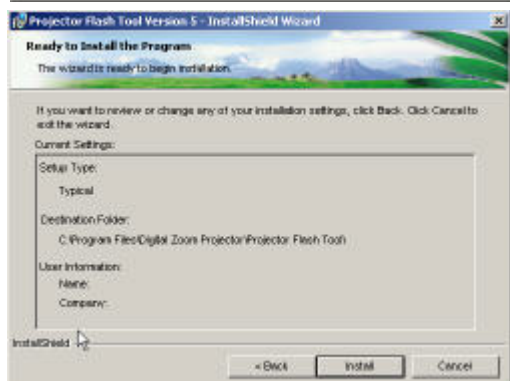
Run the “Digital Zoom Projector Flash Tool Vx.y.msi”, it will automatically launch the USB drivers update. Following are the dialogues of the Driver Install process...



This is the first page of install dialog.



This is the driver installation destination dialogue, use “Change” button to override the default directory if you decide to put it into different place.

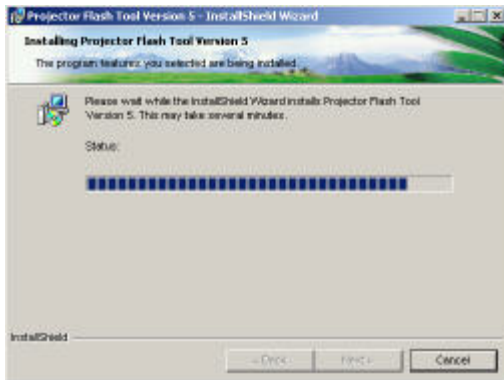


Ready to install the drivers into the PC, press <Install> to start.

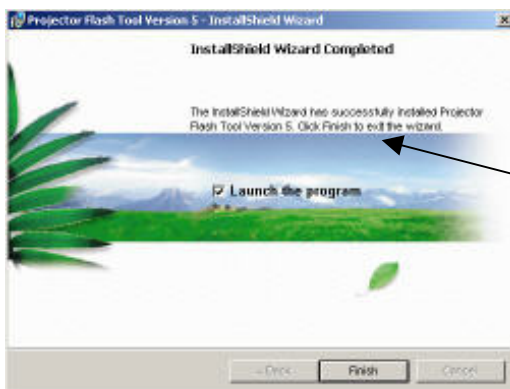
Company Confidential

Optoma\_\_\_\_\_

Delta\_\_\_\_\_



The Installer copies the necessary files to PC.

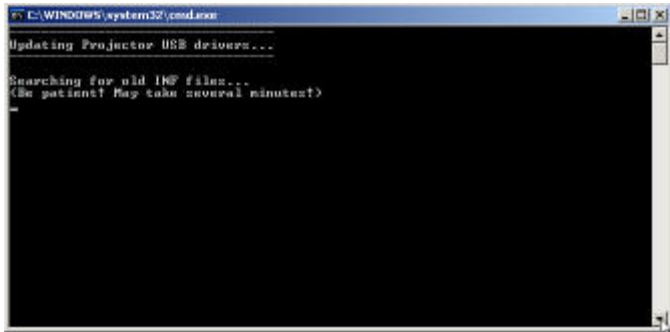


Press the <Finish> button with the Launch checkbox checked, the wizard will start the INF update.

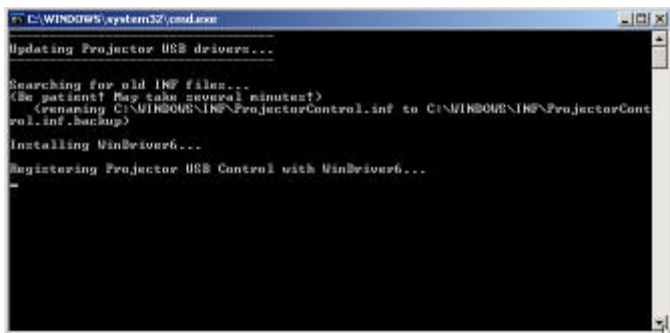
**Launch the  
driver update**

**Note:**

*The INF update may take a while depends your computer speed and INF numbers...,  
Be patient! These windows will automatically close after the updating finished.*

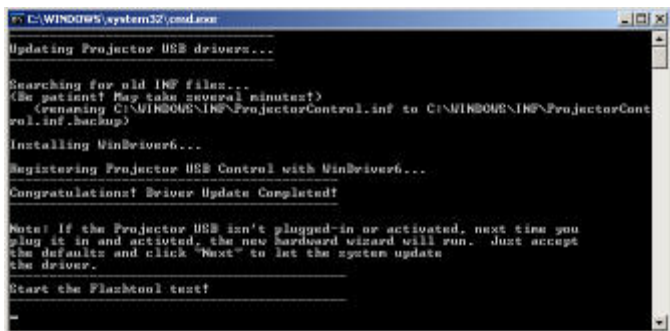


The install program copy the new INF into Windows directory, it will search the old INF and replace it with the newer one.

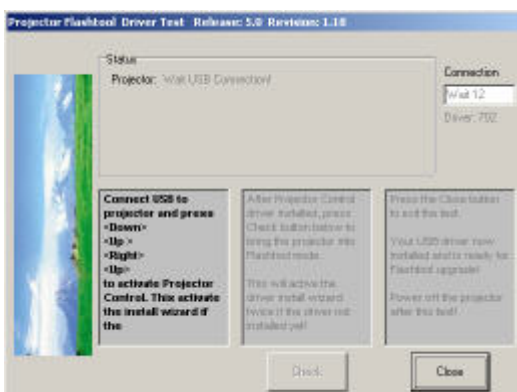


Remove the USB cable between PC and projector if it is connected.

The WinDrive USB drivers will be installed and registered to system.



After the driver install, a test application will start automatically with Windows hardware wizard for all necessary USB driver.

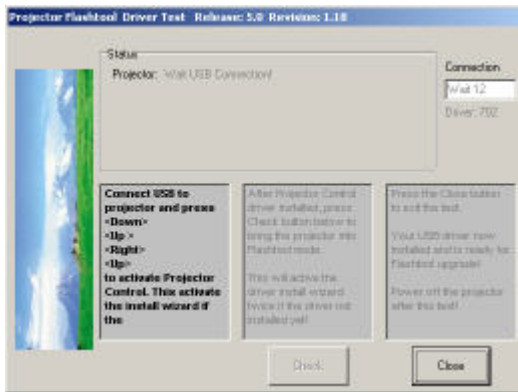


The driver test launched, wait for the key stroke to enter Projector Control mode...

**Connect the USB cable now!**

If the driver test application does not launch automatically, run the "Launch FlashToolBL.exe" from installed short cut at

**Program> Digital Zoom Projector> projector flashtool version 5> Launch FlasToolBL.exe**

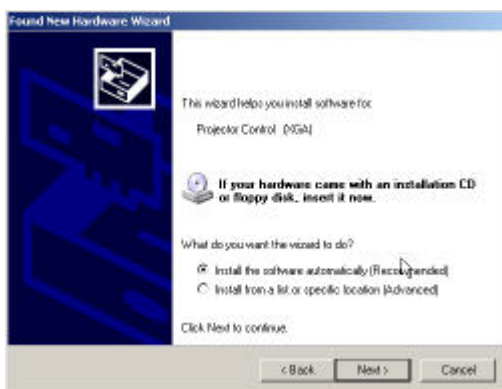


**Make sure the USB cable is firmly attached between projector and computer; the power switch is in ON position and projector is in STAND BY mode.**

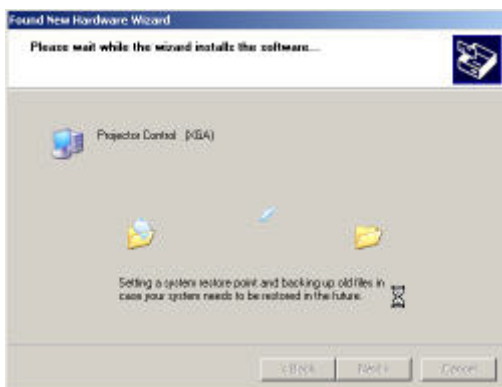
Press **<Down>**, **<Up>**, **<Right>**, **<Up>** key in sequence on keypad (DP16/DP18/DP3622 series) or IR remote controller (DP02 series). The power and lamp LED will blink and the Projector Control mode will be enabled.



The New Hardware Wizard launched at **the first time** Windows detects a new USB device attached. Use the recommended suggestion usually works all the way in the process. (Select "No, not this time"; Press the Next) (Windows XP-SP2)



(Press the Next)



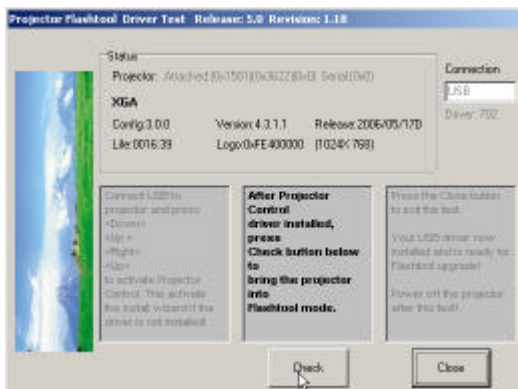
Windows detected and updating the USB Projector Control driver.



Windows completed the new hardware wizard.  
Press Finish to end the Wizard.

**Note:**

*In case you got USB enumeration problem, the USB no longer recognize your projector!  
Please clear the USB items in the windows registry and install the Flashtool USB driver again.  
(Ref: Appendix-A)*



Once the Projector Control USB driver enumerated; the projector information displays in the status pane. Press the <Check> button will drive the projector turns into Flashtool mode. This is verifying that if the projector will switch to Flashtool mode or not!

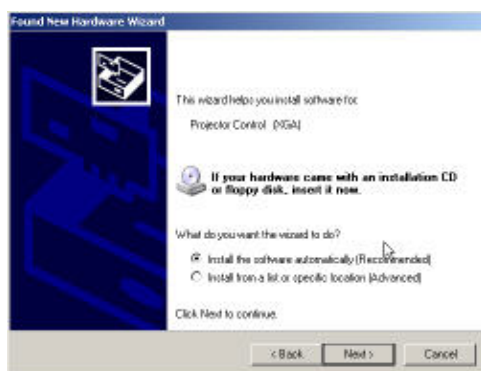
The projector is switching to Flashtool mode after click the <Check>...





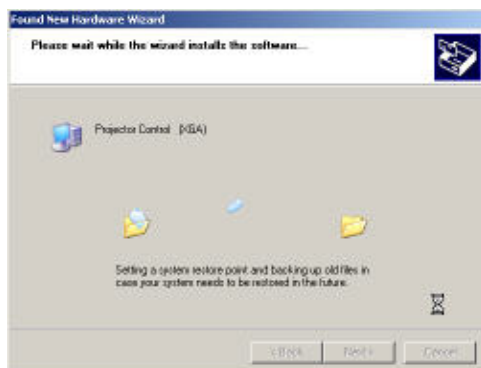
The Windows New Hardware Wizard will launch again for the second USB Projector Control.

(Select “No, not this time”; Press the Next) ( Windows XP-SP2)



Follow the recommended options and process the driver installation.

(Press the Next)

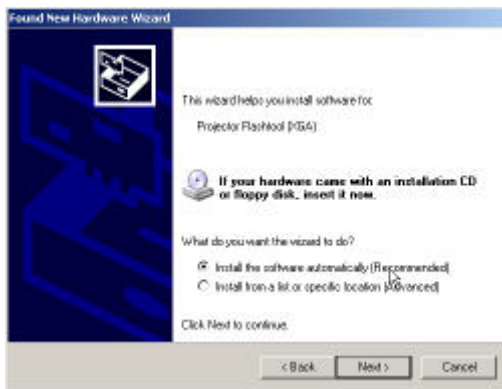


Wizard copies the necessary files and updates the driver.

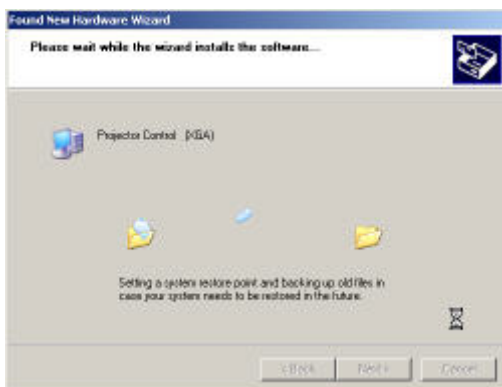


Windows New Hardware Wizard launches for the Projector Flashtool USB device.

(Select “No, not this time”; Press the Next) (Windows XP-SP2)



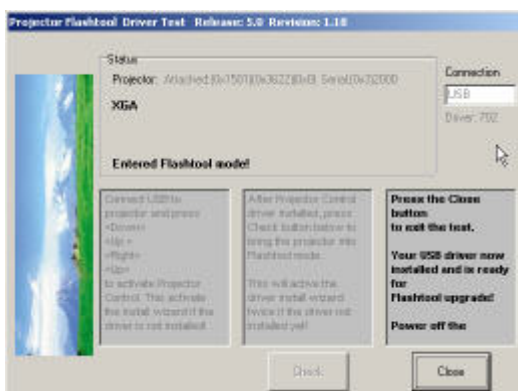
Follow the recommended options and process the driver installation.  
(Press the Next)



Wizard copies the necessary files and updates the driver.



Flashtool USB driver installed.  
Press Finish to end the Wizard.



**Congratulations!** Power off the projector now, your driver has been checked and works for Flashtool.

## Appendix-A

### How to clear the USB enumeration registry?

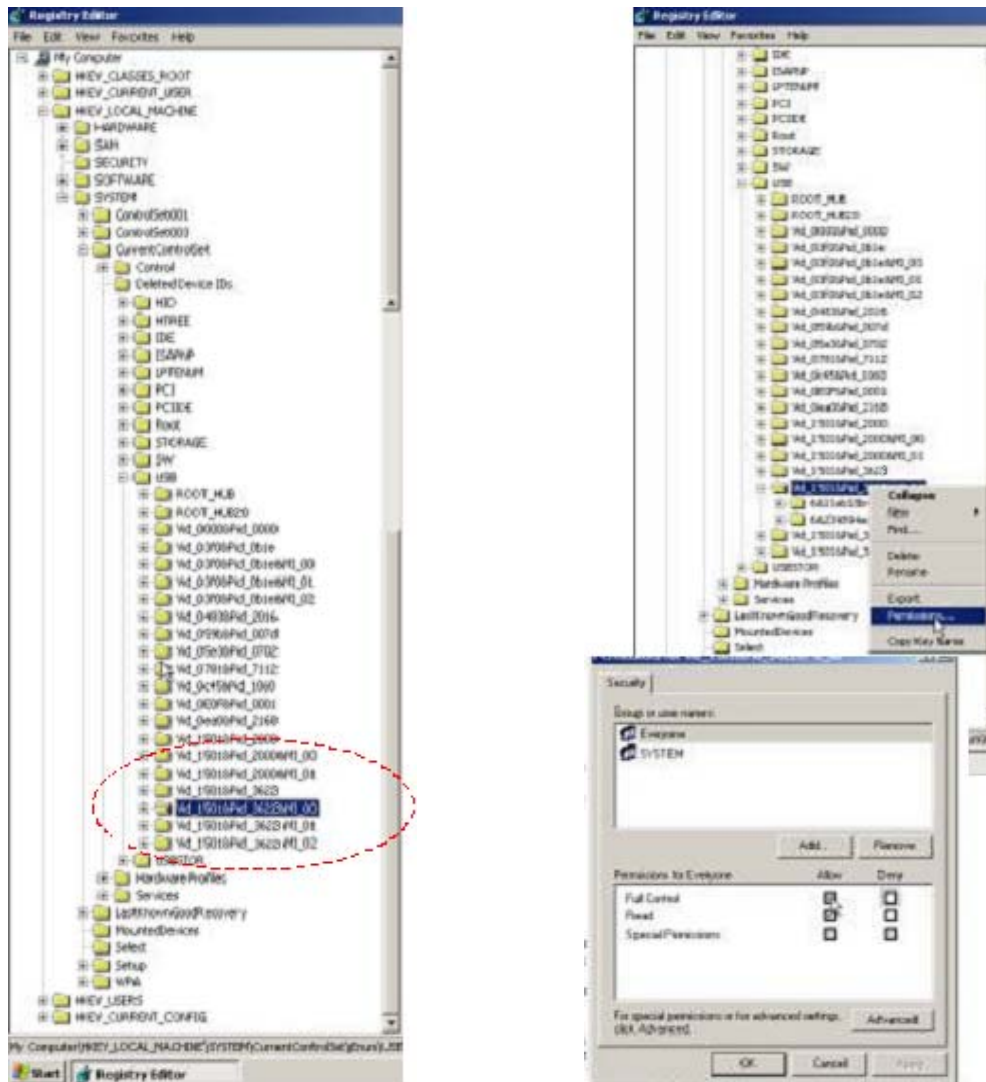
Run "regedit" and select the following items

**HKEY\_LOCAL\_MACHINE->SYSTEM->CurrentControlSet->Enum->USB->**

The DP3635 series **VID 1501&Pid 3635xxx**

Press <Delete> and remove these registries. (You need the read/write privilege of the Windows registry to delete it.

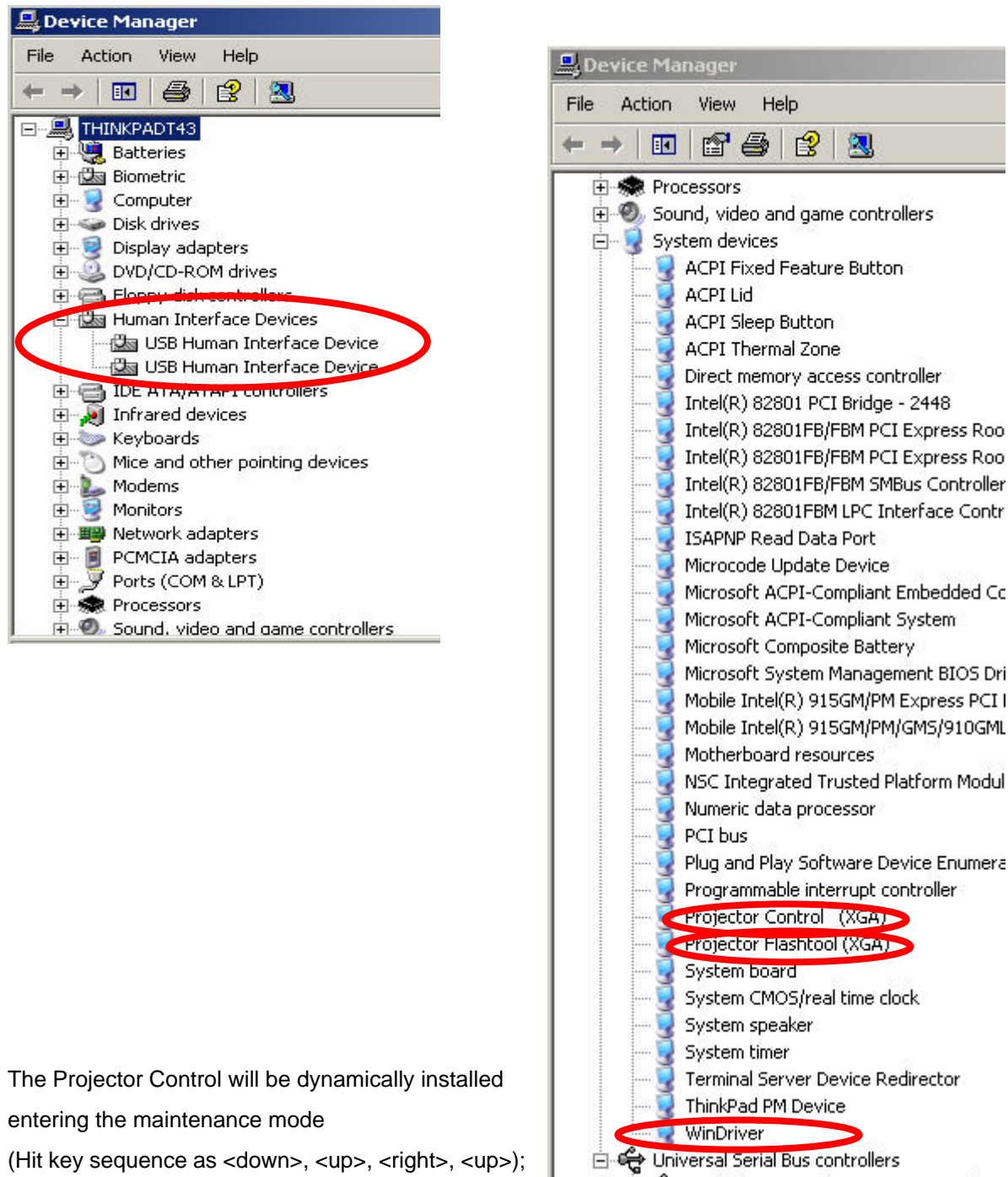
Select the item and click right mouse will lead you to the Permissions dialog for applying the security options)



## Appendix-B

### Projector USB status on Windows Device Manager

The USB HID device will be installed automatically via Windows' USB hot-plug mechanism.



The Projector Control will be dynamically installed entering the maintenance mode

(Hit key sequence as <down>, <up>, <right>, <up>);

Projector Flashtool will be dynamically installed

when starting the flash upgrading by Flashtool or FlashtoolBL utility.

The WinDriver is the root driver for both Projector Control and Flashtool.

## 5-2 DLP Projector Flash-Tool (firmware) User Guide

Ver 5.0

**NOTE:**

The user must have administrative privileges on the target computer in order to install your driver. The installation target directory must not write protected.

**Attention:** This utility is for DLP DDP2000/3020 series projector only.

### System Requirement:

- . IBM compatible PC.
- . Windows XP operating system (English).
- . Operator must have basic knowledge of Windows device installation.
- . Projector Flashtool USB driver installed.

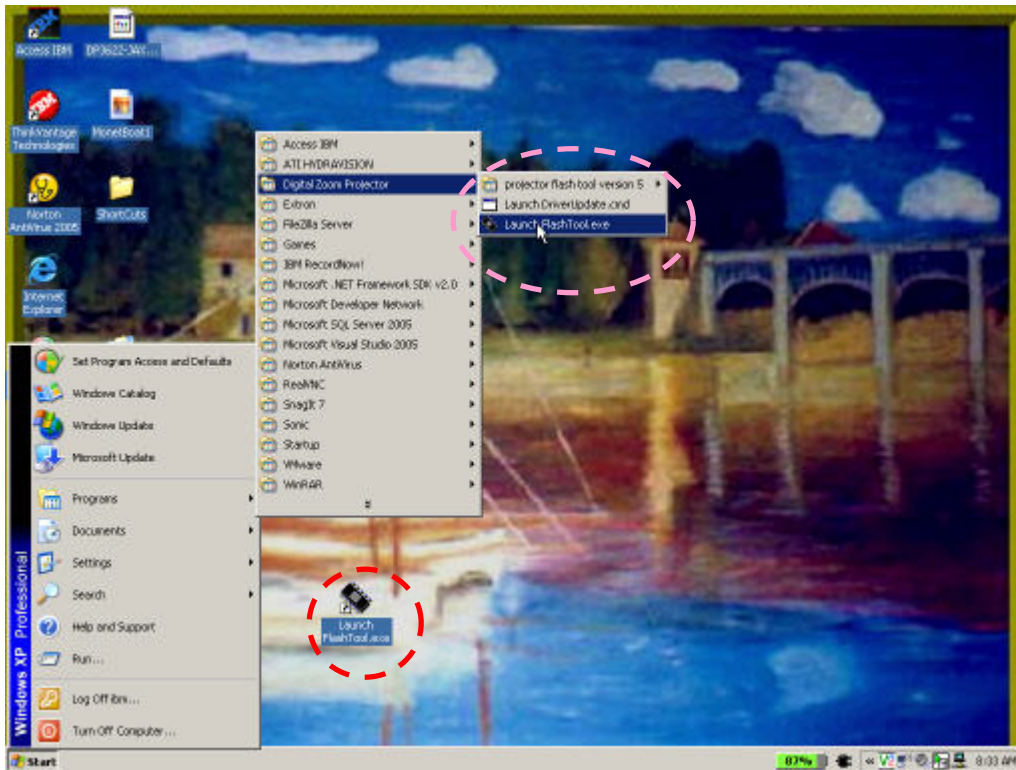
### Install Flash-Tool to PC

Run the "[Digital Zoom Projector Flash Tool Vx.y.msi](#)", if your projector USB drivers not installed yet! Check the USB driver installation guide about the how-to.

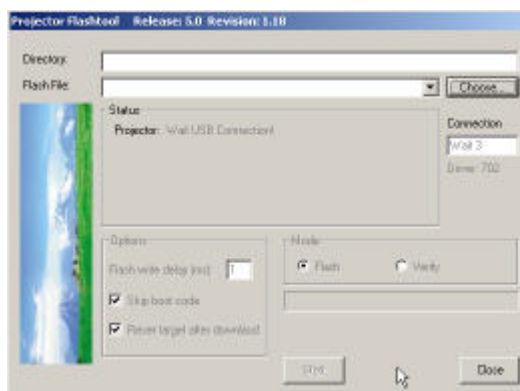
## Flash-Tool User's Guide (upgrading projector firmware)

**Step 1:** Launch the "FlashTool.exe" from installed short-cut at

**Program > Digital Zoom Projector > Launch FlasTool.exe** or click the "Lauch FlashTool.exe" shortcut icon on the desktop.



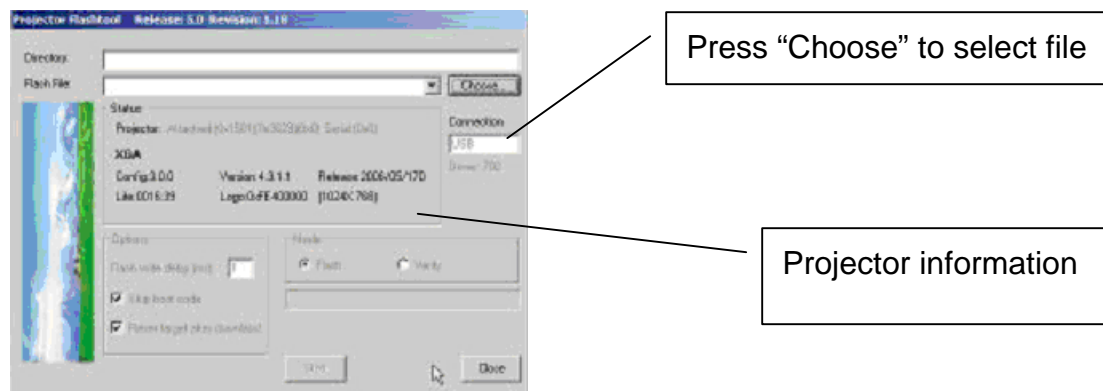
**Step 2:** Following is the screen capture when there is no projector connected.





**Step 3:** Make sure the USB cable is firmly attached between projector and computer; the power switch is in **ON** position (if the projector got hardware power switch) and projector is in **STAND BY** mode.

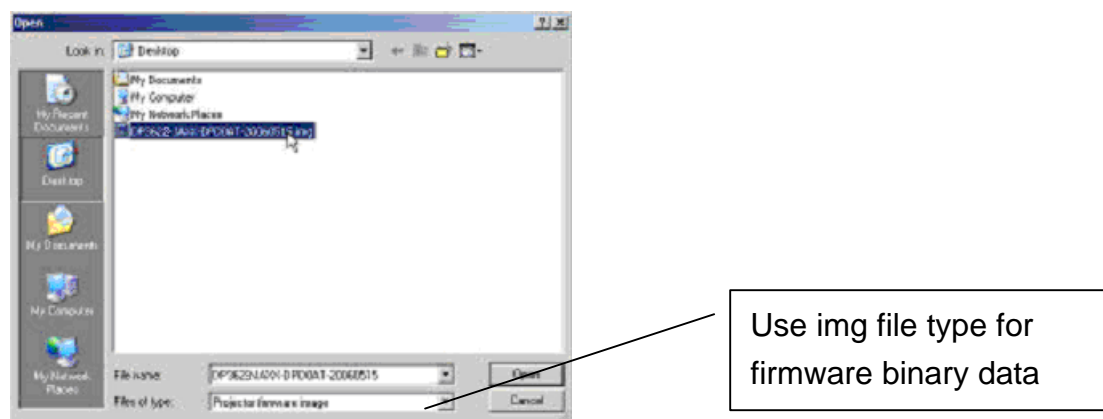
Press **<Down>**, **<Up>**, **<Right>**, **<Up>** key in sequence on keypad (DP2601/2618/3618 series) or IR remote controller (DP3602 series) . The power and lamp LED will blink and the Flash-Tool mode will be enabled.



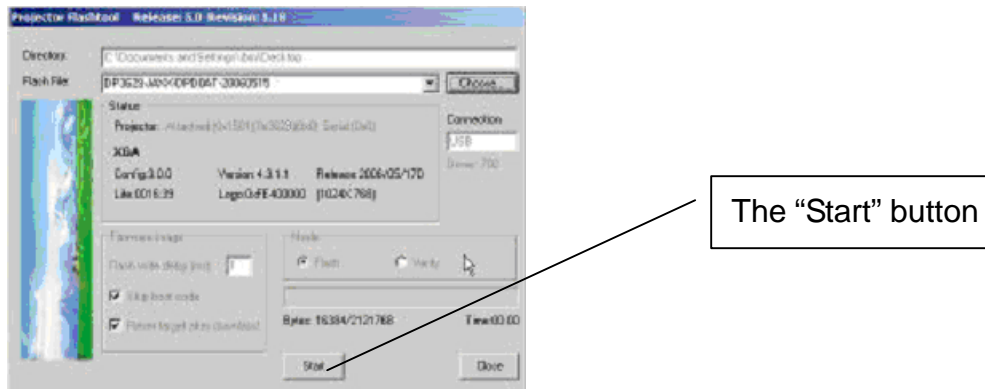
**Note:**

The Windows hardware wizard will pop up if the USB device driver is not installed. Just select the recommended options and let Windows Wizard do it automatically...

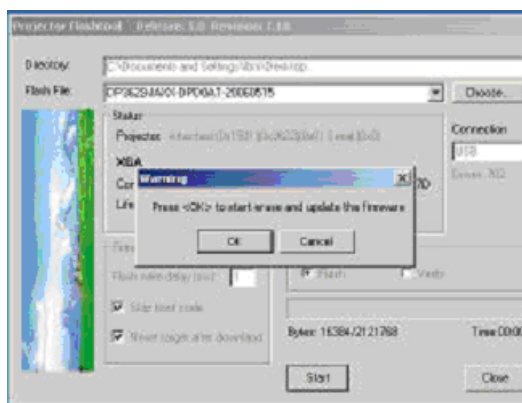
**Step 4:** Press "Choose" button to locate the new firmware which can be downloaded from website (for example: DP3635-JAXX-DPD0A.img). Select the candidate .img file and either double click it or press the "Open" button to load the file.



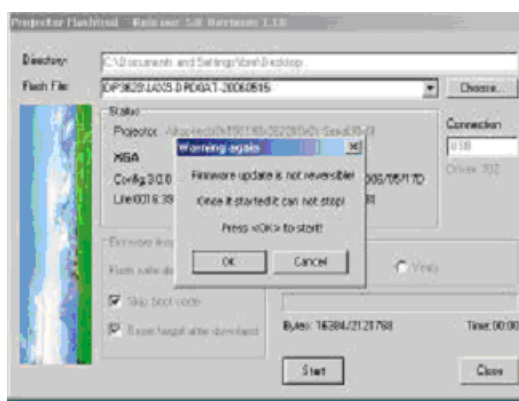
**Step 4-1:** The Flashtool will validate the signature of the binary image file for upgrading. The “Start” button will not enable if the binary image is not a valid projector firmware.



**Step 5:** Press “Start” button to start flash the firmware into projector, the warning message box will appear to get your confirmation. Press <OK> to continue.



**Step 6:** The last warning message box appears, this is the last chance to stop the update, press “OK” button to start the firmware update.

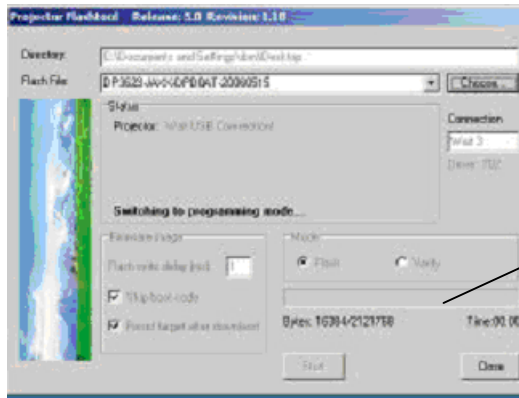




**Caution:**

**DO NOT install any USB driver when erasing or upgrading process started.**

**Step 7:** By the Flash technology, the old firmware needs to be erased first. Flash-Tool will automatically erase the old firmware before upgrading.

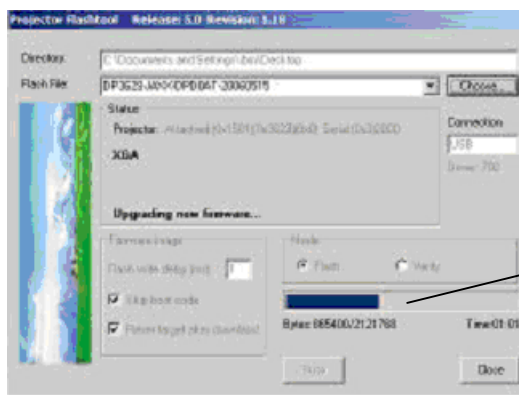


Erasing status

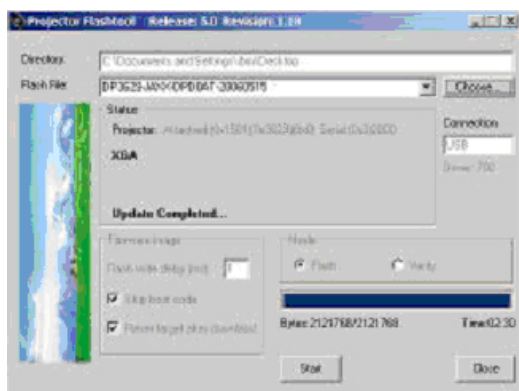
**Caution:**

**DO NOT install any USB driver when erasing or upgrading process started.**

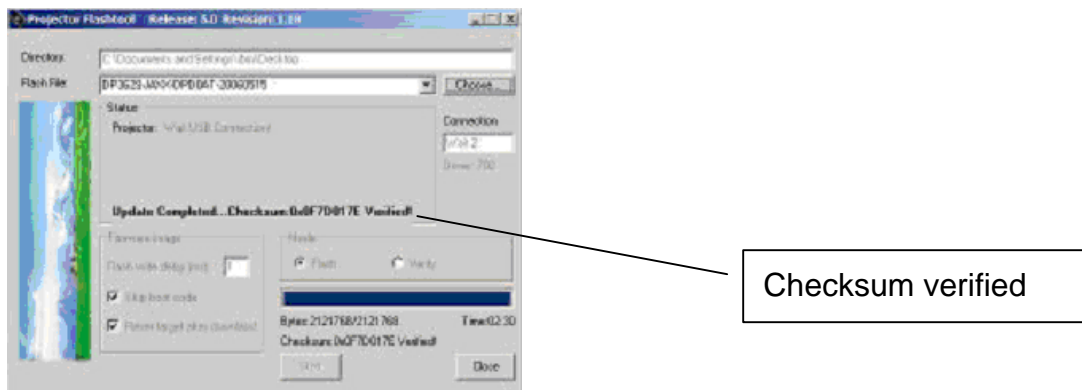
**Step 8:** After old firmware erased, the new firmware upgrading process will start.



Upgrading new firmware



**Step 9:** After the new firmware upgraded, the Flash-Tool will perform the final validation. The dialog showed checksum with verification message!



**Step 10: Done! Power off the projector.**

### 5-3 DLP Projector Flash-Tool (splash logo) User Guide

**NOTE:**

The user must have administrative privileges on the target computer in order to install your driver. The installation target directory must not write protected.

**Attention:** This utility is for DLP DDP2000/3020 series projector only.

**Ver 5.0**

#### System Requirement:

- . IBM compatible PC.
- . Windows XP operating system (English).
- . Operator must have basic knowledge of Windows device installation.
- . Projector Flashtool USB driver installed.

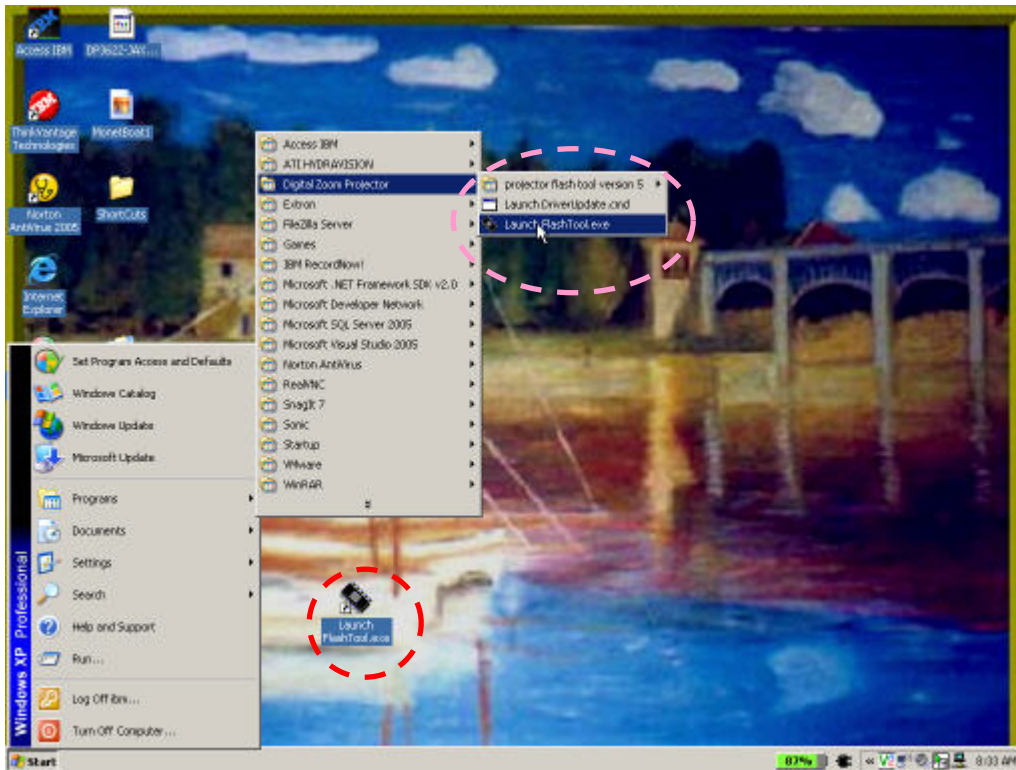
#### Install Flash-Tool to PC

Run the “[Digital Zoom Projector Flash Tool Vx.y.msi](#)”, if your projector USB drivers are not installed yet! Check the USB driver installation guide about the how-to.

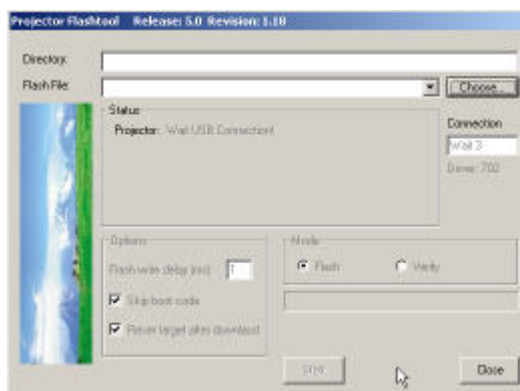
## Flash-Tool User's Guide (upgrading projector logo)

**Step 1:** Launch the "FlashTool.exe" from installed short-cut at

**Program > Digital Zoom Projector> Launch FlasTool.exe** or click the "Lauch FlashTool.exe" shortcut icon on the desktop.

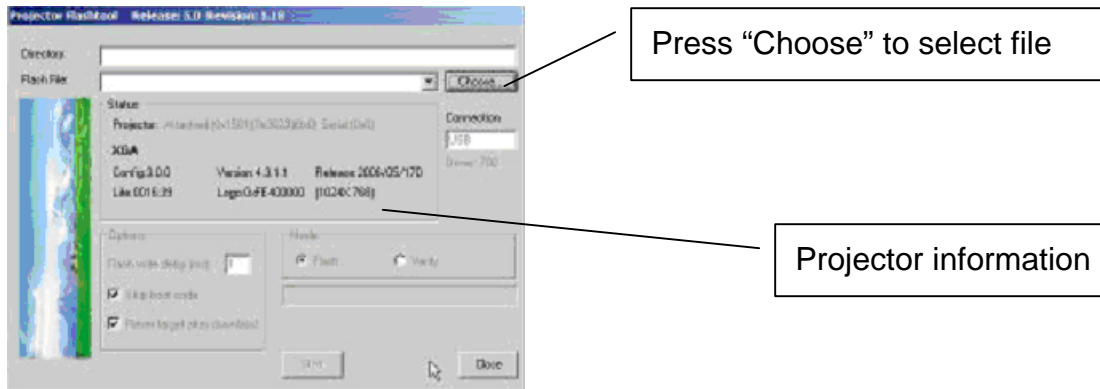


**Step 2:** Following is the screen capture when there is no projector connected.



**Step 3: Make sure the USB cable is firmly attached between projector and computer; the power switch is in ON position (if the projector got hardware power switch) and projector is in STAND BY mode.**

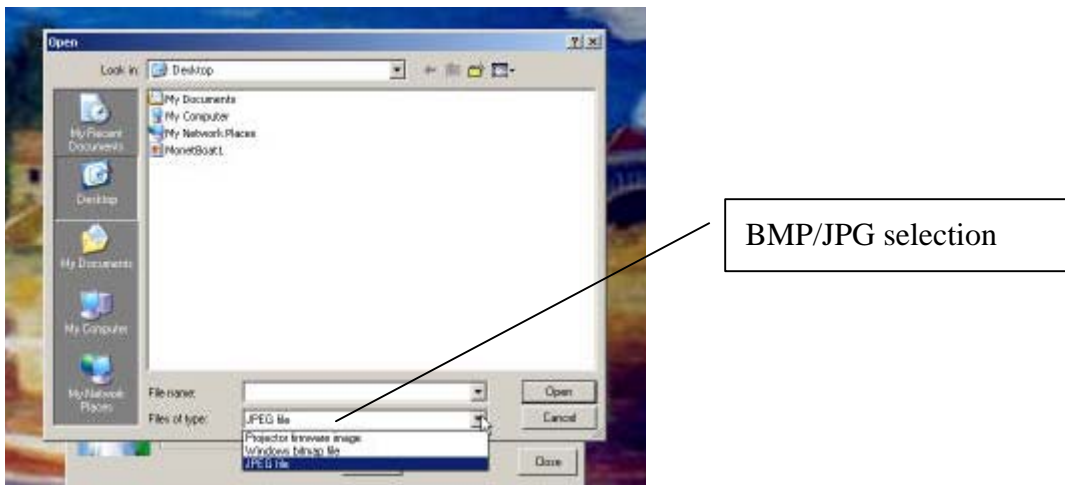
Press **<Down>**, **<Up>**, **<Right>**, **<Up>** key in sequence on keypad (DP2601/2618/3618 series) or IR remote controller (DP3602 series) . The power and lamp LED will blink and the Flash-Tool mode will be enabled.



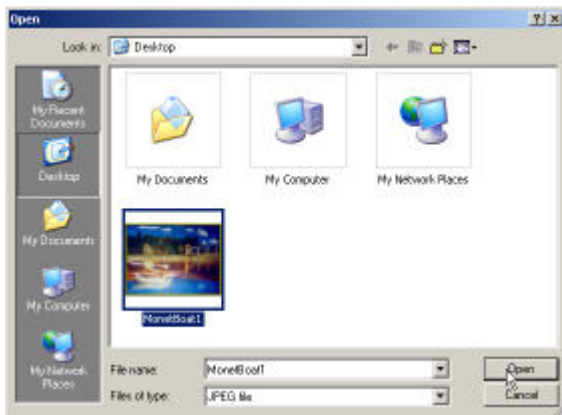
**Note:**

The Windows hardware wizard will pop up if the USB device driver is not installed. Just select the recommended options and let Windows Wizard do it automatically...

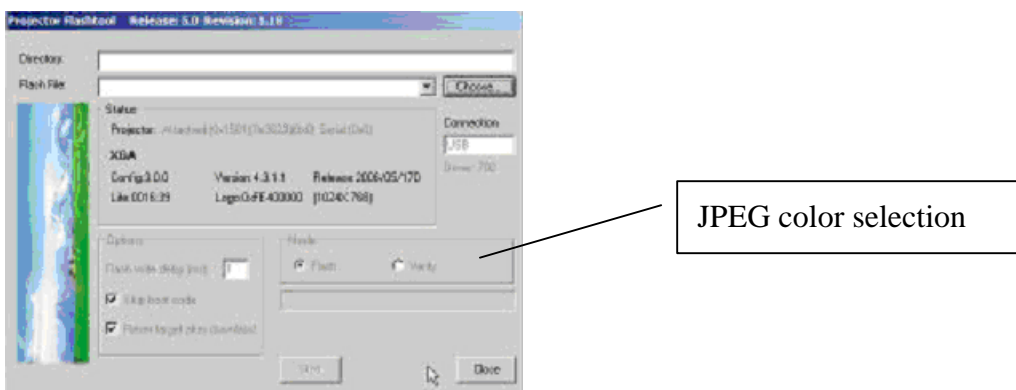
**Step 4:** Press “Choose” button and select either BMP or JPG in the “File of type” option.



**Step 4-1:** Double click the logo file or use open button to select the logo you want.

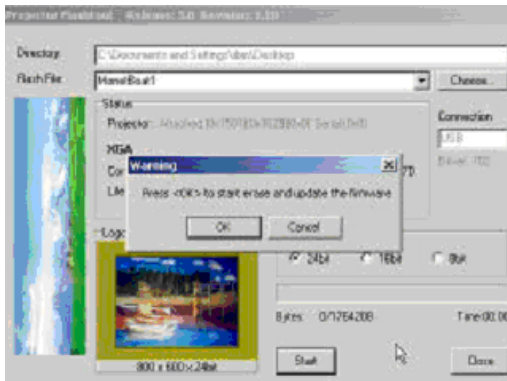


**Step 4-2:** The Flashtool will validate the size of the logo file. Logo will be converted to RLE format and stored to the projector's flash memory. The compressed RLE size can not exceed the flash memory limitation. In case of the size problem, try to reduce the colors by select the JPEG colors option in the tool. (Valid only for JPEG files)

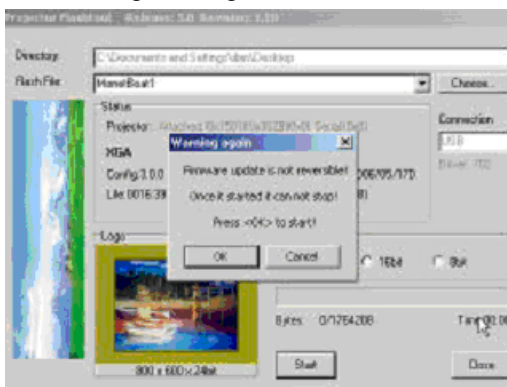




**Step 5:** Press “Start” button to start flash the firmware into projector, the warning message box will appear to get your confirmation. Press <OK> to continue.



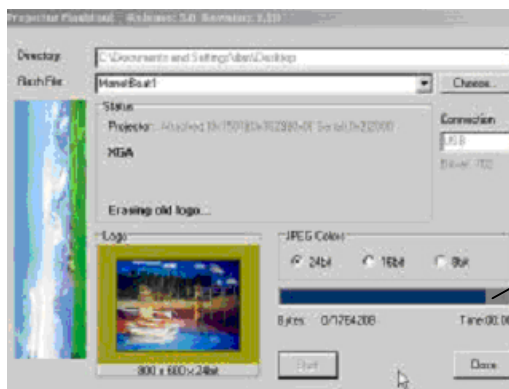
**Step 6:** The last warning message box appears, this is the last chance to cancel the update, press “OK” button to start the logo change.



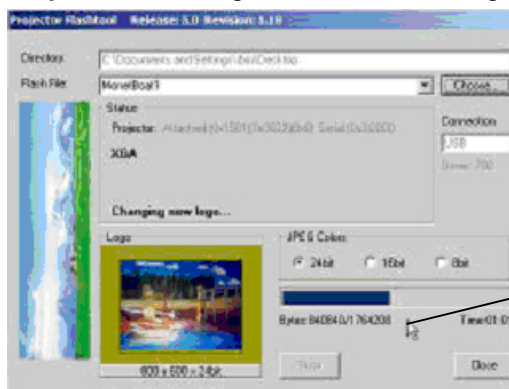
### Caution:

**DO NOT install any USB driver when erasing or upgrading process started.**

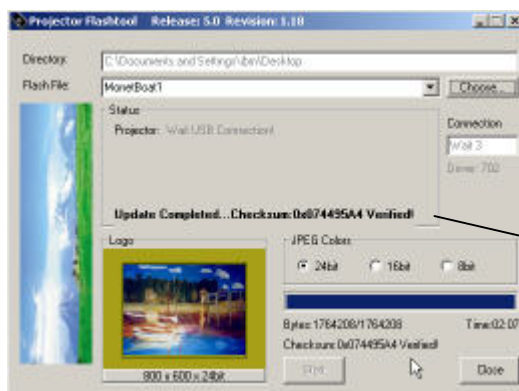
**Step 7:** By the Flash-ROM technology, Flash-Tool need to erase the old logo data before it can change it.



Erasing old logo

**Caution:****DO NOT install any USB driver when erasing or upgrading process started****Step 8:** After old logo erased, the new logo upgrading process will start.

Changing new logo

**Step 9:** After the new logo changed, the Flash-Tool will perform the final validation. The dialog showed checksum with verification message!

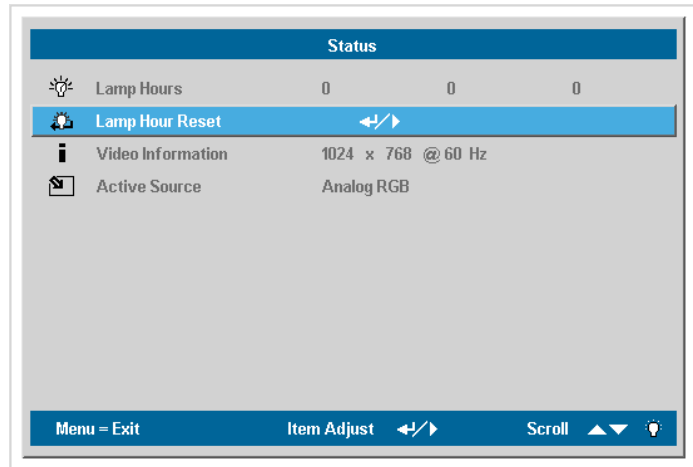
Checksum verified

**Step 10: Done! Power off the projector.**

## 5-4 How user can reset lamp hours !!

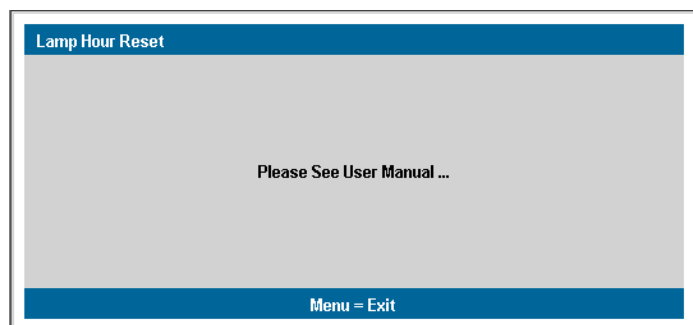
After replacing the lamp, you should reset the lamp hour counter to zero. Refer to the following:

1. Press the **Menu** button to open the Main menu.
2. Press the cursor ◀▶ button to move to the **Status** menu.
3. Press the cursor ▲▼ button to move down to **Lamp Hour Reset**.
4. Press the cursor ▶ or **Enter** button.



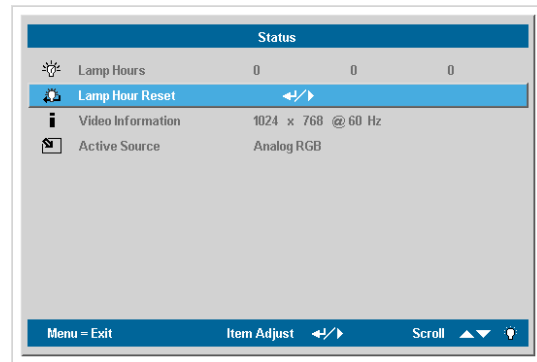
A message screen appears.

5. Press the cursor buttons in this order:  
▼; ▲; ◀; ▶.  
The **Status** menu appears again showing the **Lamp Hours** reset to zero.

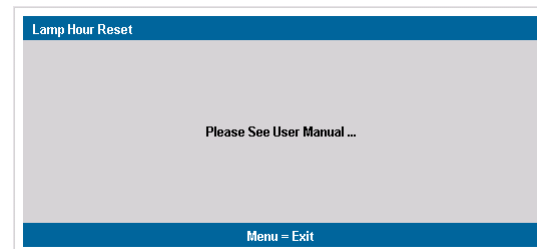


## 5-5 Check Lamp hours information in Service mode (J4P Series)

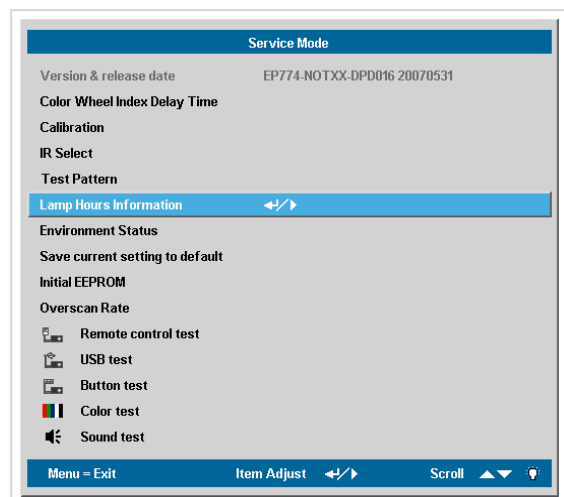
**Step1** In **Status** Menu , select **Lamp Hour Reset** function and press “Enter” key on keypad or IR controller to go into Lamp Hours Reset sub-page .



**Step2** In Lamp Hours Reset sub-page press “Enter”, “Enter”, “Up”, “Down”, “Left”, “Right” in sequence .



**Step3** After press password right , it will go into a Service page . Used up / down key on keypad or IR to highlight the item “Lamp Hours Information” and press “Select/Right” to go into Lamp Hours Information menu.



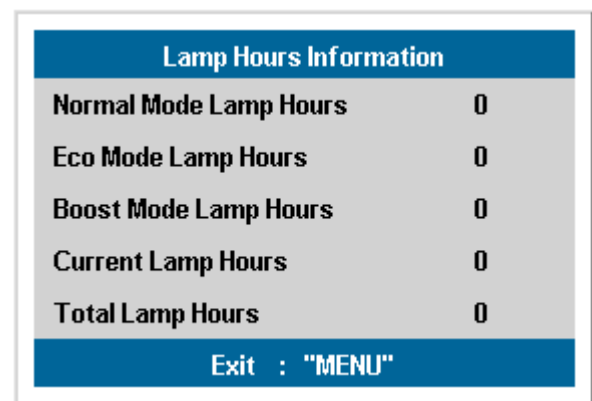
In Lamp Hours Information menu, “Normal Mode Lamp Hours “ show normal mode lamp hours usage in current lamp.

“Eco Mode Lamp Hours “ show eco mode lamp hours usage in current lamp.

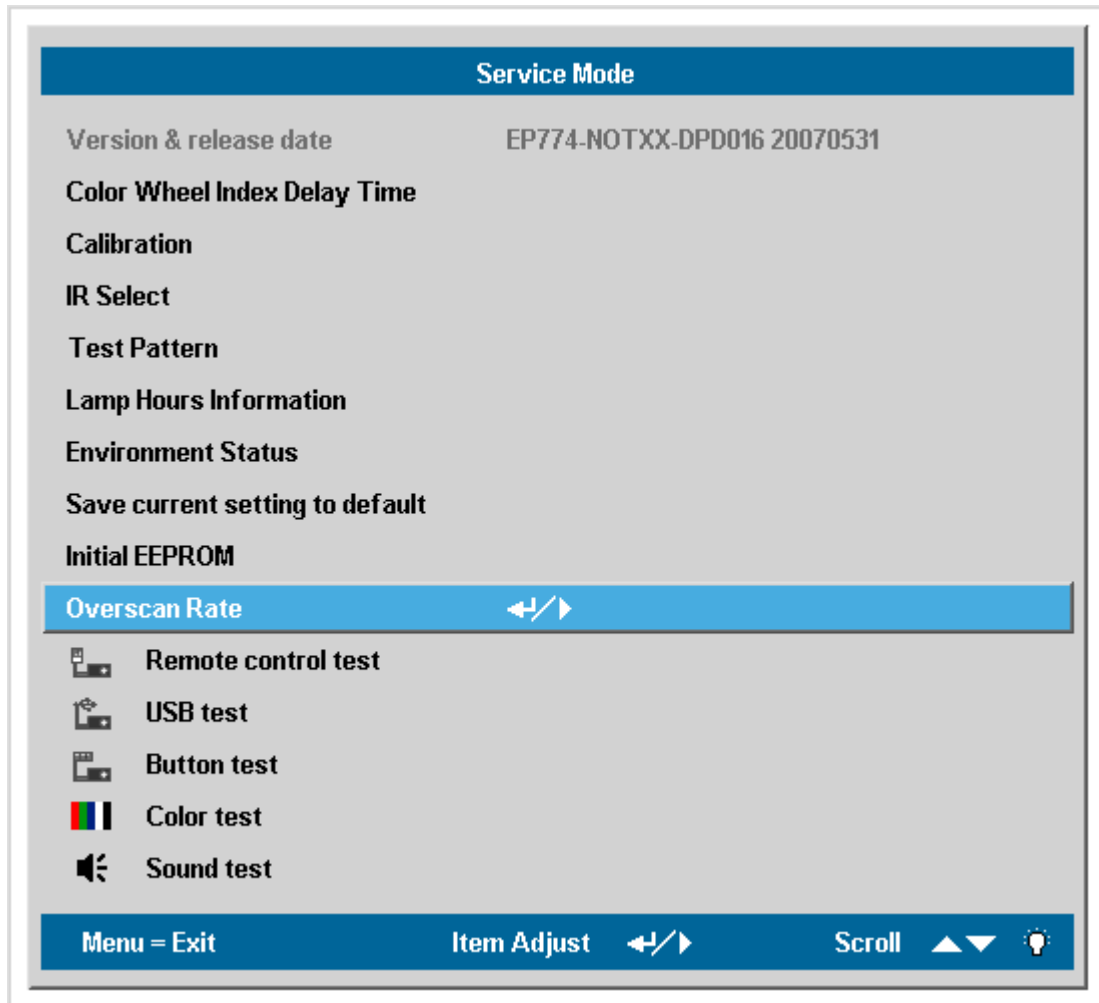
**Step4** “Boost Mode Lamp Hours “ show boost mode lamp hours usage in current lamp.

“Current Lamp Hours “ show current lamp hours usage in current lamp(Normal + Eco + Boost).

“Total Lamp Hours “ show all lamp hours usage in projector (cann’t be reset).

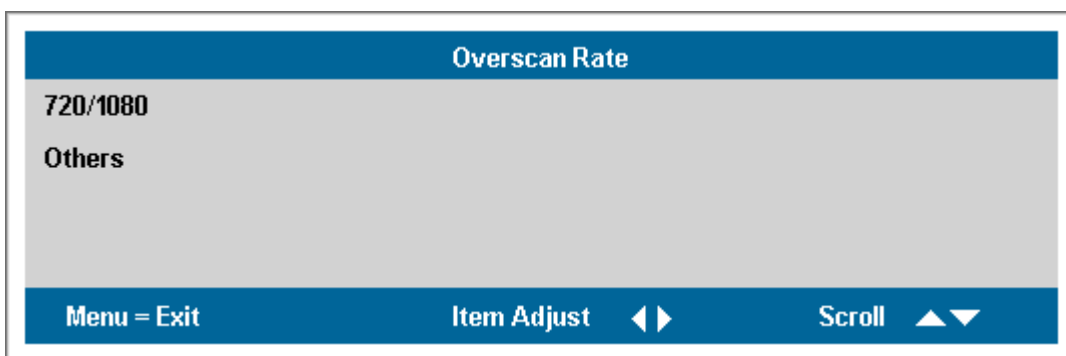


## 5-6 Overscan Rate

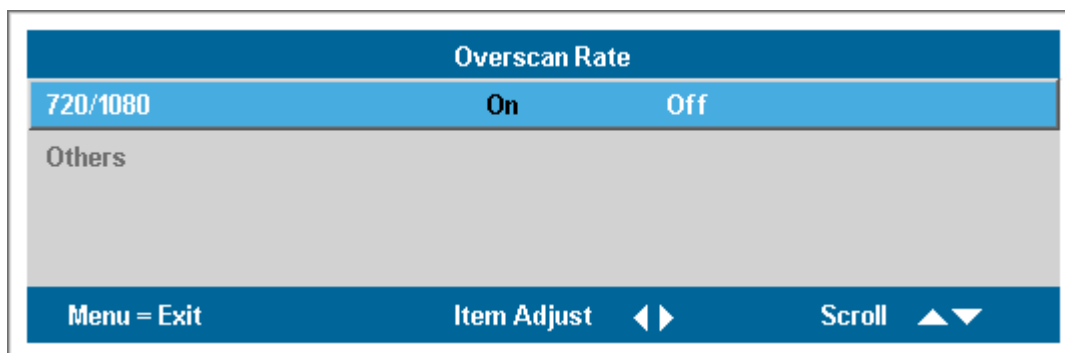


<b>Description:</b>	Enter the overscan rate menu.
---------------------	-------------------------------

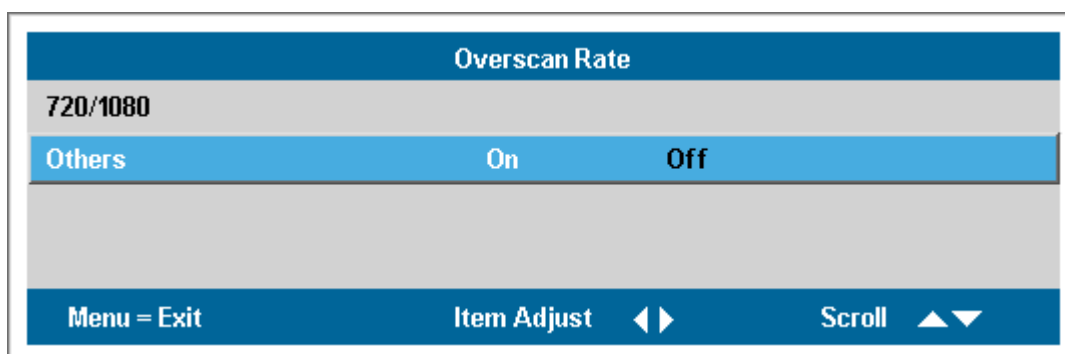
## Overscan Rate Menu





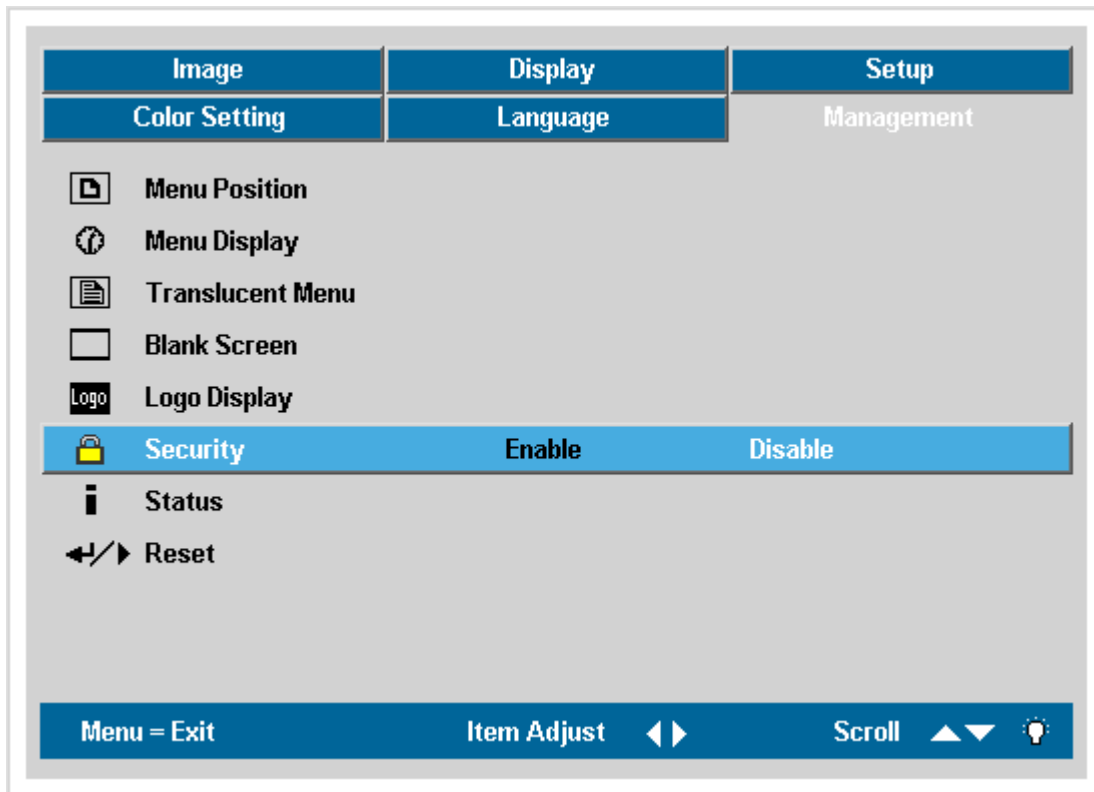
**720p/1080i**

<b>Description:</b>	Use the Left and Right keys to adjust the Component Video (720p and 1080i) overscan ratio.		
<b>Steps</b>	<b>Minimum</b>	<b>Maximum</b>	<b>Default value</b>
2	On	Off	Off

**Others**

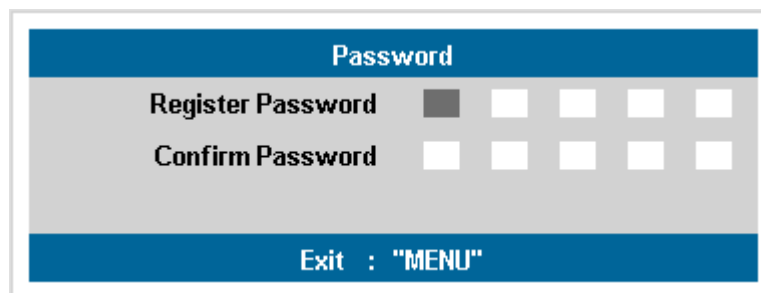
<b>Description:</b>	Use the Left and Right keys to adjust those overscan ratio except 720p/1080i (i.e. the SVideo, Composite Video, Component Video 480i, 480p, 576i, 576p).		
<b>Steps</b>	<b>Minimum</b>	<b>Maximum</b>	<b>Default value</b>
2	On	Off	ON

## 5-7 DLP Projector security



<b>Description:</b>	Use the Left and Right keys to enable or disable security lock function.		
<b>Steps</b>	<b>Minimum</b>	<b>Maximum</b>	<b>Default value</b>
2	Enable	Disable	Disable

The Password Menu will be displayed if the "Security Lock" enabled. The available keys for the password entry are <Up>, <Down>, <Left>, <Right> either on keypad or IR remote controller. Use <Menu> to cancel the password input.



If Register Password is the same as Confirm Password, the password will be memorized.

Password					
Register Password	*	*	*	*	*
Confirm Password	*	*	*	*	*
OK					
Exit : "MENU"					

The password confirm menu appears when user press the power-on key in case the “Security Lock” function enabled. Only <Up>, <Down>, <Left>, <Right> and <Power> key are available.

Password					
Cancel : "MENU"					

### ***How to reset password:***

In case of lost of the password, please contact with the service-center. Service-center will validate the owner and help resetting the password. (See “DLP Projector security unlock guide”)

## 5-8 DLP Projector security unlock (Optoma EP774 series)

Ver 1.0.2

The document is to describe a Windows application software "DLPUnlock" for projector password unlock. Its main purpose is to provide a way to reset the forgotten password, the application will ship to the call-center and help the validated end-user to reset the password.



Hint code Input at here.

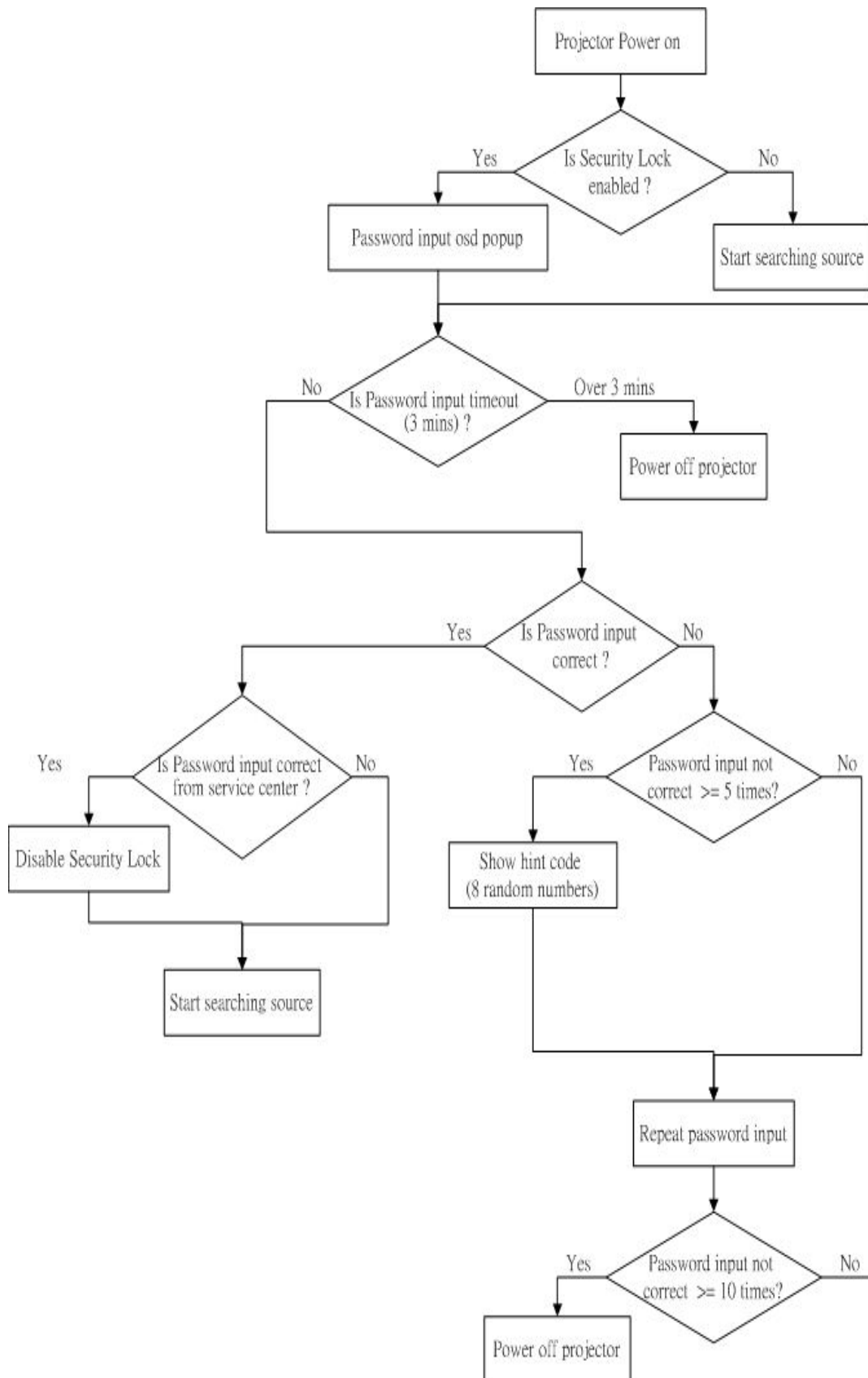
User can get the hint code from projector OSD.

Press here to generate the key



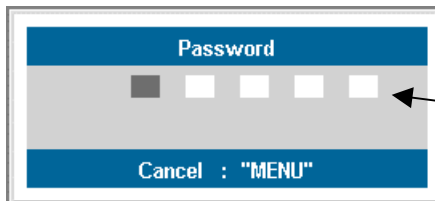
Key for resetting the password

## J4P security password reset flow-chart

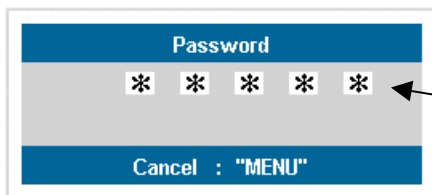




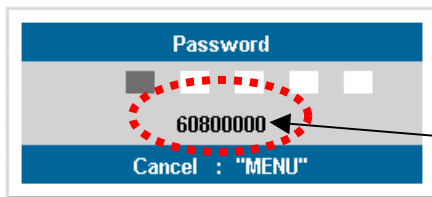
Projector OSD for password check & reset



Password validates  
at power-on.



Password input at  
power-on.



Hint code appeared  
when wrong password  
input over 5 times.

## 6. How To Program By RS232

### Projection Display Serial Interface

#### 6-1 RS232 Setting

Baud rate:	<b>9600</b>
Parity check:	<b>None</b>
Data bit:	<b>8</b>
Stop bit:	<b>1</b>
Flow Control	<b>None</b>

Minimum delay for next command: **1ms**

#### 6-2 Control Command Structure

The command is structured by the Header code, command code, data code and end code. Most of the commands are structured except some for the compatibility issue with other projectors.

	Header code	Command code	Data code	End code
HEX	7Eh	Command	Data	0Dh
ASCII	'~'	Command	Data	CR

#### 6-3 Control Sequence

The projector may send a return code after it received a command. If the command isn't received correctly, the projector will not send the return code

#### 6-4 Operation Command

The operation commands execute the basic operation setting of this projector.

Operation	ASCII	HEX
Power On ※	~ P N CR ※	7Eh 50h 4Eh 0Dh
Power Off	~ P F CR	7Eh 50h 46h 0Dh
Auto Image	~ A I CR	7Eh 41h 49h 0Dh
Input Select RGB	~ S R CR	7Eh 53h 52h 0Dh
Input Select RGB2	~ S G CR	7Eh 53h 47h 0Dh
Input Select DVI	~ S D CR	7Eh 53h 44h 0Dh
Input Select Video	~ S V CR	7Eh 53h 56h 0Dh
Input Select S-Video	~ S S CR	7Eh 53h 53h 0Dh
Input Select Component	~ S Y CR	7Eh 53h 59h 0Dh
Input Select Wireless	~ S W CR	7Eh 53h 57h 0Dh

\* Power On command will not work for 1 minute after the power off command triggered.

- **CR** : Carriage Return.

## 6-5 Remote Command

The remote commands simulate the code send from IR remote handset.

Button's name	ASCII	HEX
UP arrow	~ r U CR	7Eh 72h 55h 0Dh
DOWN arrow	~ r D CR	7Eh 72h 44h 0Dh
LEFT arrow	~ r L CR	7Eh 72h 4Ch 0Dh
RIGHT arrow	~ r R CR	7Eh 72h 52h 0Dh
POWER	~ r P CR	7Eh 72h 50h 0Dh
EXIT	~ r E CR	7Eh 72h 45h 0Dh
INPUT	~ r I CR	7Eh 72h 49h 0Dh
AUTO	~ r A CR	7Eh 72h 41h 0Dh
KEYSTONE+	~ r K CR	7Eh 72h 4Bh 0Dh
KEYSTONE-	~ r J CR	7Eh 72h 4Ah 0Dh
MENU	~ r M CR	7Eh 72h 4Dh 0Dh
STATUS	~ r S CR	7Eh 72h 53h 0Dh
MUTE	~ r T CR	7Eh 72h 54h 0Dh
ZOOM+	~ r Z CR	7Eh 72h 5Ah 0Dh
ZOOM-	~ r Y CR	7Eh 72h 59h 0Dh
BLANK	~ r B CR	7Eh 72h 42h 0Dh
FREEZE	~ r F CR	7Eh 72h 46h 0Dh
VOLUME+	~ r V CR	7Eh 72h 56h 0Dh
VOLUME-	~ r W CR	7Eh 72h 57h 0Dh
Enter	~ r N CR	7Eh 72h 4Eh 0Dh

## 6-6. Set Value Command

ITEM	ASCII	HEX
Brightness	~ s B ? CR ※	7Eh 73h 42h ?h 0Dh
Contrast	~ s C ? CR	7Eh 73h 43h ?h 0Dh
Color	~ s R ? CR	7Eh 73h 52h ?h 0Dh
Tint	~ s N ? CR	7Eh 73h 4Eh ?h 0Dh
Scaling	~ s A ? CR	7Eh 73h 41h ?h 0Dh
Color Temperature	~ s T ? CR	7Eh 73h 54h ?h 0Dh
Projection Mode	~ s J ? CR	7Eh 73h 4Ah ?h 0Dh

? : ASCII Data

## Data Range

ITEM	Set Data Range	Source
Brightness	0 ~ 100	ALL
Contrast	0 ~ 100	ALL
Color	0 ~ 100	Video/S-Video/Component
Tint	0 ~ 100	Video/S-Video/Component
Scaling	0: 4:3 1: 16:9	ALL
Color Temperature	0: Cool 1: Ceiling 2: Warm	ALL
Projection Mode	0: Front 1: Rear 2: Rear+Ceiling 3: Ceiling	ALL

**Attention:** Data range may be different for different models

**Example 1.** Adjust Brightness value to 100

Send Command : ~sB100CR

**Example 2.** Adjust Color Temperature to Warm

Send Command : ~sT2CR

## 6-7. Query Command

ITEM	ASCII	HEX
Software Version	~ q V CR	7Eh 71h 56h 0Dh
Power State	~ q P CR	7Eh 71h 50h 0Dh
Input Select	~ q S CR	7Eh 71h 53h 0Dh
Lamp Hours	~ q L CR	7Eh 71h 4Ch 0Dh
Brightness	~ q B CR	7Eh 71h 42h 0Dh
Contrast	~ q C CR	7Eh 71h 43h 0Dh
Color (Video)	~ q R CR	7Eh 71h 52h 0Dh
Tint (Video)	~ q N CR	7Eh 71h 4Eh 0Dh
Scaling	~ q A CR	7Eh 71h 41h 0Dh
Color Temperature	~ q T CR	7Eh 71h 54h 0Dh
Projection Mode	~ q J CR	7Eh 71h 4Ah 0Dh

Response message

ITEM	Response Message examples	
Software Version	.....	
Power State	On Off	
Input Select	RGB DVI Video S-Video Component DVD HDTV	
Lamp Hours	2000	
Brightness	100	
Contrast	100	
Color (Video)	100	
Tint (Video)	100	
Scaling	4:3 16:9	
Color Temperature	Cool Normal	
Projection Mode	Front Rear+Ceiling Rear Ceiling	

**Example 1. Get Brightness value**

Send Command : ~qB CR

Response : 100

**Example 2. Get Color Temperature**

Send Command : ~qT CR

Response : Warm



## 6-8. Hyper Terminal setting guide

### 6-8-1 Connect the RS232 Cable between your computer and Projector .

### 6-8-2 Open HyperTerminal

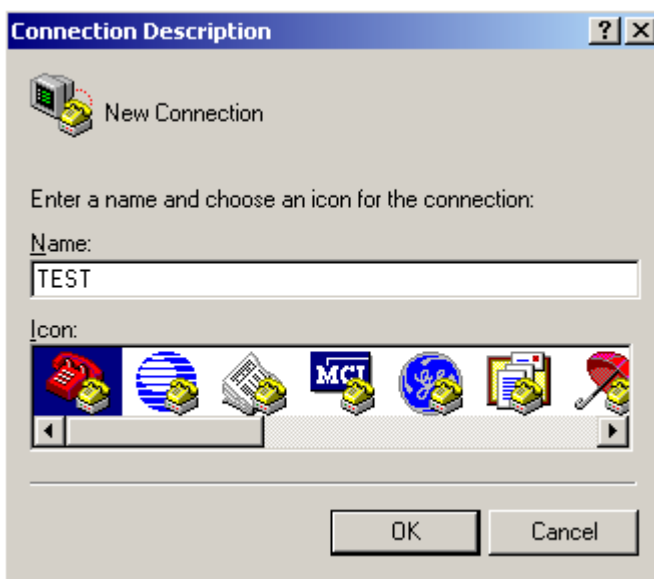
Window2000/XP HyperTerminal path :

Start \ Programs \ Accessories \ Communications \ HyperTerminal .



### 6-8-3 Setting the HyperTerminal parameter :

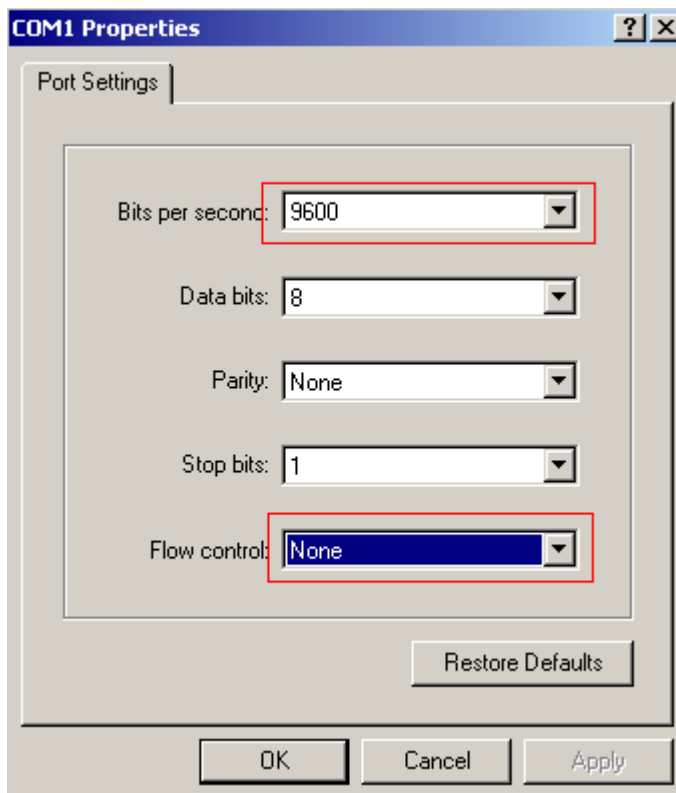
Step 1. Type the connection name .



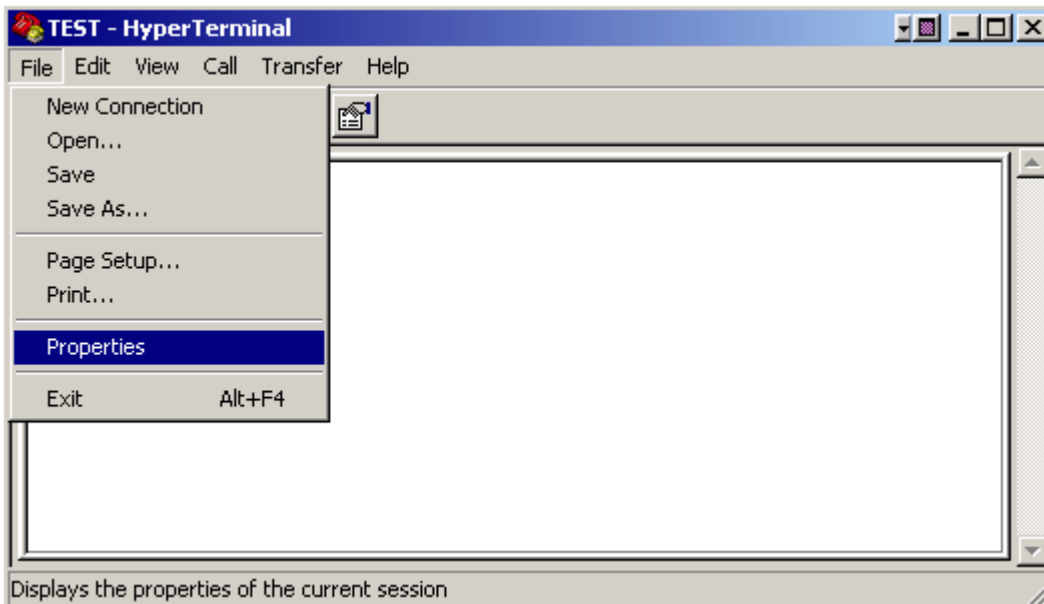
Step2 . Choose the COM port for your RS232 Cable connected to.



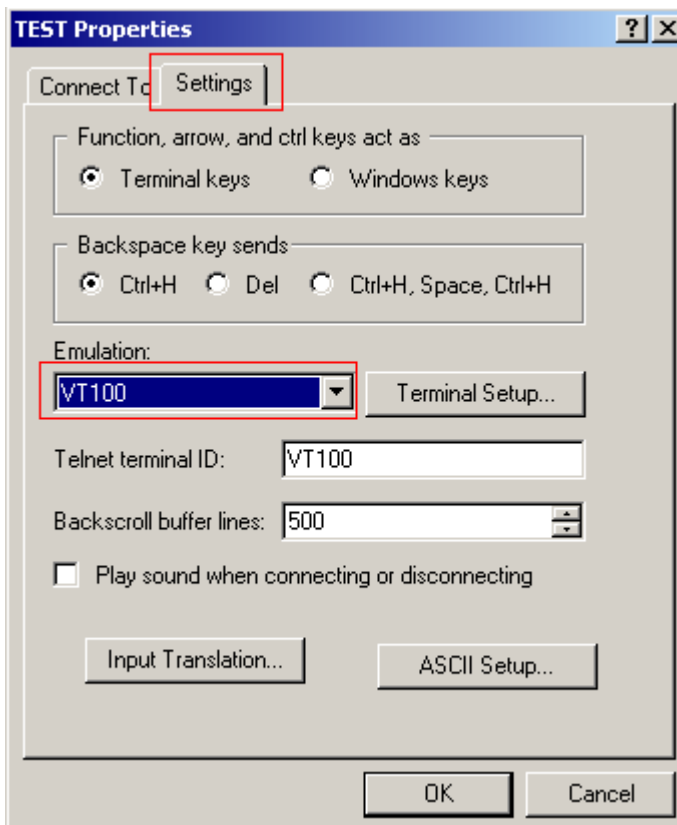
Step3. In Bits per second choose “ 9600 ” and in Flow control choose “ None ” .



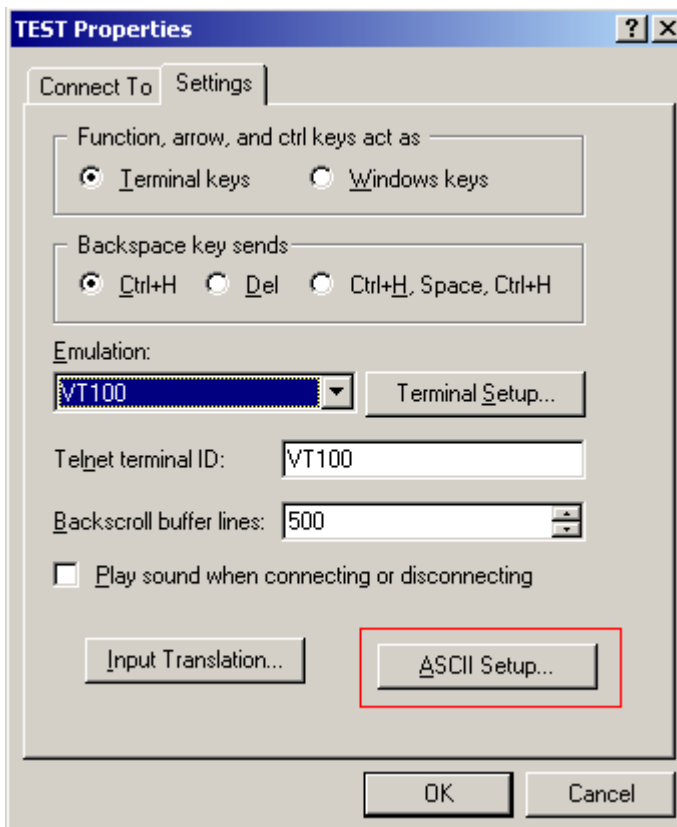
Step4. Click the File and choose Properties to setting Keyboard parameter .



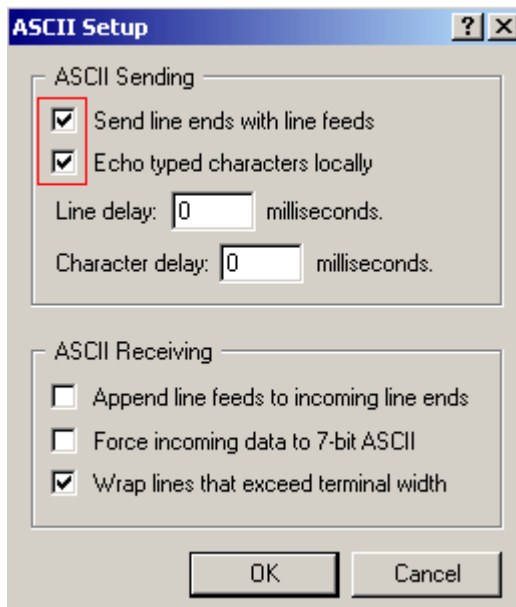
Step5. In Setting page , choose Emulation type for your keyboard.



Step6. Click ASCII Setting icon to setup ASCII code parameter.



Step7. Mark Send Line ends with line feeds and Echo typed characters locally and click OK bottom to complete setting.



## 7. SERVICE NOTE

### 7-1. Cleaning

Carry out cleaning of the main unit and interior when replacing the lamp or making inspections.

The glass cleaner used with the following parts is as follows.

Product name : Kei-Dry Wiper 132-S (Kureshia Co., Ltd.)

#### 1) Cleaning the Projection Lens

\*When dust and fingerprints, etc. are on the lens surface, use the designated glass cleaner to remove as shown in the figure at the right. For fingerprints and other soiling that are difficult to remove with a dry cloth, use a designated glass cleaner which has been moistened in water and then use a dry cloth to dry it off.

\*The projection lens surface has a special coating. Do not use detergents or solvents on the surface.

#### 2) Cleaning the Color Wheel Assy.

\*The color filter is made of thin glass. Be very careful when handling the filter.

\*In case of fingerprints, etc. on the surface, clean in the same way as the projection lens unit as described in item 1). Do not use detergents as this could cause peeling of the color filter.

#### 3) Cleaning the DMD

\*The DMD surface is glass and can be cleaned. However, avoid scratches as these can have a direct influence on the image.

\*In case of dust on the DMD surface use an air cleaner ( with a device to prevent static, if possible) to clean off the surface.

\*In case of fingerprints, etc., add a small amount of water to the designated glass cleaner and wipe off in one direction. Then use the designated dry glass cleaner to wipe off in the same direction.

\*Do not use absolute alcohol or other substances that could leave streaks after drying.

#### 4) Cleaning the Reflecting Mirror

\*Be careful not to touch the reflecting mirror. The surface is composed of vapor deposition silver and touching it directly with the hands can lead to burnishing.

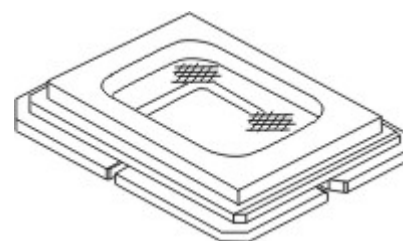
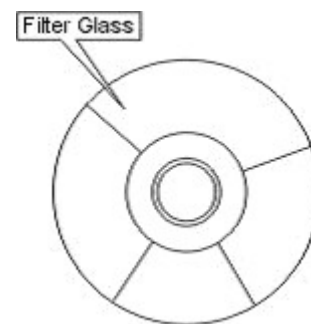
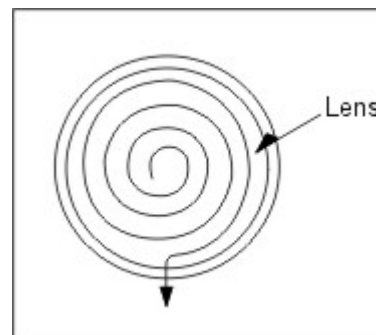
\*Do not clean other than with air.

#### 5) Cleaning the Main Unit

\*Clean with a soft fuzz-free cloth. In case of severe soiling, use a well-wrung cloth dipped in a neutral agent to remove soiling and then finish with a dry cloth.

\*Do not clean with thinner, benzene or similar agents as this could lead to deterioration or peeling of paint.

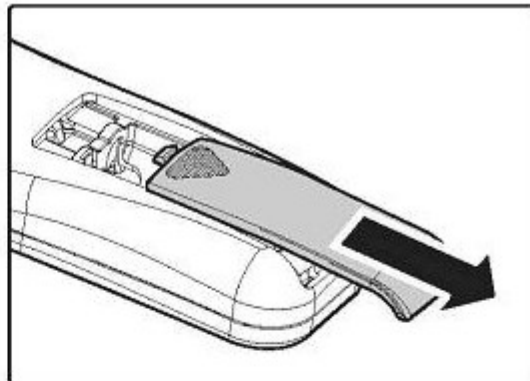
\*In case of dust in suction or exhaust holes or the interior, disassemble the main unit and use air to remove the dust from the inside.



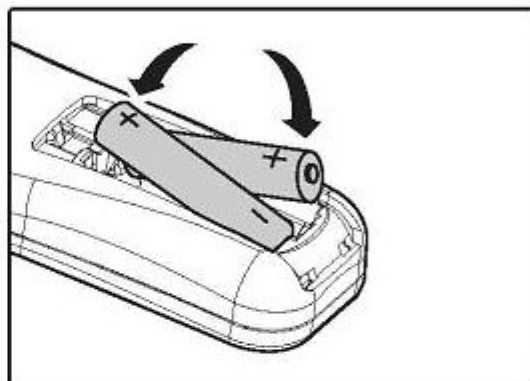
## 7-2. Remote control for battery replacement

### Inserting the Remote Control Batteries

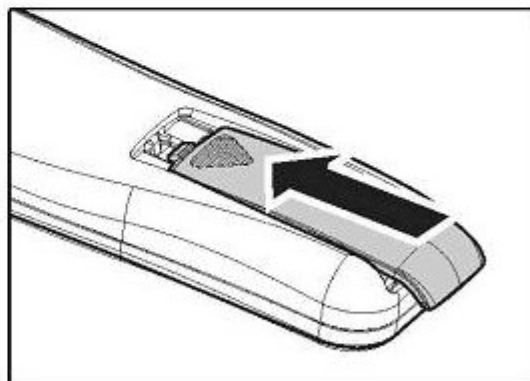
1. Remove the battery compartment cover by sliding the cover in the direction of the arrow.



2. Insert the supplied batteries taking note of the polarity (+/-) as shown here.



3. Replace the cover.

**Caution:**

1. Only use AAA alkaline batteries.
2. Dispose of used batteries according to local ordinance regulations.
3. Remove the batteries when not using the projector for prolonged periods.



### 7-3. Power & READY LED Blink Code Message

#### LED Flash Timing

Example:

LED   on off on off on off...※delay on off on off on off

—————▶ Flash the LED on / off 3 times ◀—————

※delay: LED Off delay about 1 second

<u>Error code message</u>	<u>Power LED</u> <u>Blink</u>	<u>Ready LED</u> <u>Blink</u>
Lamp usage task created error	2	1
Environment usage task created error	2	2
Thermal break status error	3	0
T1 temperature over temperature	3	1
T2 temperature over temperature	3	2
T1 sensor status fail	4	1
T2 sensor status fail	4	2
Lamp lit error	5	1
Ballast SCI error	5	2
Ballast UART error	5	3
Fan1 error (Lamp)	6	1
Fan2 error (Ballast)	6	2
Fan3 error (Burner)	6	3
Fan4 error (Power)	6	4
Lamp door sensor detect high	7	0
DMD error	8	0
Color wheel error	9	0

## 7-4. Factory Preset Display Modes

Signal	Resolution	H-Sync [KHz]	V-Sync [Hz]	Component	Video	Analog	Digital
VESA	640 x 350	31.5	70.1	--	--	○	○
	640 x 350	37.9	85.1	--	--	○	○
	720 x 350	31.5	70.0	--	--	○	○
	640 x 400	31.5	70.1	--	--	○	○
	640 x 400	37.9	85.1	--	--	○	○
	720 x 400	31.5	70.0	--	--	○	○
	720 x 400	37.9	85.0	--	--	○	○
	640 x 480	31.5	60.0	--	--	○	○
	640 x 480	37.9	72.8	--	--	○	○
	640 x 480	37.5	75.0	--	--	○	○
	640 x 480	43.3	85.0	--	--	○	○
	800 x 600	35.2	56.3	--	--	○	○
	800 x 600	37.9	60.3	--	--	○	○
	800 x 600	46.9	75.0	--	--	○	○
	800 x 600	48.1	72.2	--	--	○	○
	800 x 600	53.7	85.1	--	--	○	○
	1024 x 768	48.4	60.0	--	--	○	○
	1024 x 768	56.5	70.1	--	--	○	○
	1024 x 768	57.7	72.0	--	--	○	○
	1024 x 768	60.0	75.0	--	--	○	○
	1024 x 768	68.7	85.0	--	--	○	○
	1280 x 1024	64.0	60.0	--	--	○	○
Apple Macintosh	640 x 480	35.0	66.7	--	--	○	○
	832 x 624	49.7	74.5	--	--	○	○
	1024 x 768	60.2	74.9	--	--	○	○
	1152 x 870	68.7	75.1	--	--	○	○
NTSC	—	15.734	60.0	--	○	--	--
PAL/SECAM	—	15.625	50.0	--	○	--	--
SDTV	720 x 576	31.3	50.0	○	--	--	--
	720 x 480	31.5	60.0	○	--	--	--
HDTV	1920 x 1080	33.8	60.0	○	--	--	--
	1920 x 1080	28.1	50.0	○	--	--	--
	1280 x 720	45.0	60.0	○	--	--	--

\* The native resolution of the panel is 1024 x 768.

Resolution others than 1024 x 768 may be display with uneven size of text or line.

\* The color of   mean Displayable only.

\* The color of   mean may have a little noise is acceptable

\* HDTV timing main check tool is DVD player, VG828 is secondary.

○ : Supported frequency

-- : Not Supported frequency

## 7-5. OPTOMA Splash LOGO screen



## 7-6.Spare parts list

1. EP774 (WHITE:DP-3635 NOTDC/NOTEG/NOTZG/NOTDG/NOTIG/NOTFG/NOTDI)  
(GRAY: DP-3635 NOTCG)

## EP774 Spare part list

TYPE	NO	DESCRIPTION		Model	P/N	Q'ty
Cover	1	CASE TOP ASSY DP-3622 (TOP CASE)	WHITE	DP-3635 NOTDC /NOTEG/NOTZG /NOTDG/NOTIG /NOTFG/NOTDI	3398032806	1
			GRAY	DP-3635 NOTCG	3398033105	
Cover	2	CASE BOTTOM ASSY DP-3622 (BOTTOM CASE)	WHITE	DP-3635 NOTDC /NOTEG/NOTZG /NOTDG/NOTIG /NOTFG/NOTDI	3398032602	1
			GRAY	DP-3635 NOTCG	3398033201	
Cover	3	CASE BACK ASSY DP-3622 (BACK CASE)	WHITE	DP-3635 NOTDC /NOTEG/NOTZG /NOTDG/NOTIG /NOTFG/NOTDI	3398031600	1
			GRAY	DP-3635 NOTCG	3398033000	
Cover	4	LAMP COVER PC 94V0 (LAMP COVER)	WHITE	DP-3635 NOTDC /NOTEG/NOTZG /NOTDG/NOTIG /NOTFG/NOTDI	3392027502	1
			GRAY	DP-3635 NOTCG	3392040301	
Foot	5	ADJ FRONT FOOT LEG PC 94V0 (HEIGHT ADJUSTER)	WHITE	DP-3635 NOTDC /NOTEG/NOTZG /NOTDG/NOTIG /NOTFG/NOTDI	3392023202	1
			GRAY	DP-3635 NOTCG	3392040201	
Fan	6	DC FAN ASSY BUB0612HB-SM00 L160/120 60 B		ALL	3620629911	1
Fan	7	DC FAN ASSY NUB0612MB-R00 L35/5 60 B		ALL	3620631711	1
Fan	8	DC FAN ASSY AFB0712HB-SE32 L115/75 70 B		ALL	3620711111	1
Fan	9	DC FAN ASSY AFB0712HB-F00 L55/15 70 B		ALL	3620711211	1
Board	10	DMD BD ASSEMBLY		ALL	5600204372	1
Board	11	POWER BOARD ASSEMBLY		ALL	5600600519	1
Board	12	MAIN BOARD ASSEMBLY		ALL	5600600459	1
Ballast	13	LAMP DRIVER 280W PULSE		ALL	0990076600	1
Optical	14	MODULE 0.7" XGA OPTICAL 280W ASSY		ALL	5811100174	1
Lamp module	15	LAMP MODULE J4P E20.6 280W ASSY DP-3635		ALL	5811100173	1
Carton	16	CARTON PAPER 434*378*258		ALL	3517129702	1
Speaker	17	SPEAKER ASSEMBLY (80hm 3W 290mm Wire, 51mm*40.6mm*25mm)		ALL	3791001806	1
Keypad	18	KEYPAD BOARD ASSEMBLY (112mm x 65mm x 1.2mm FR-4 )		ALL	5600600271	1

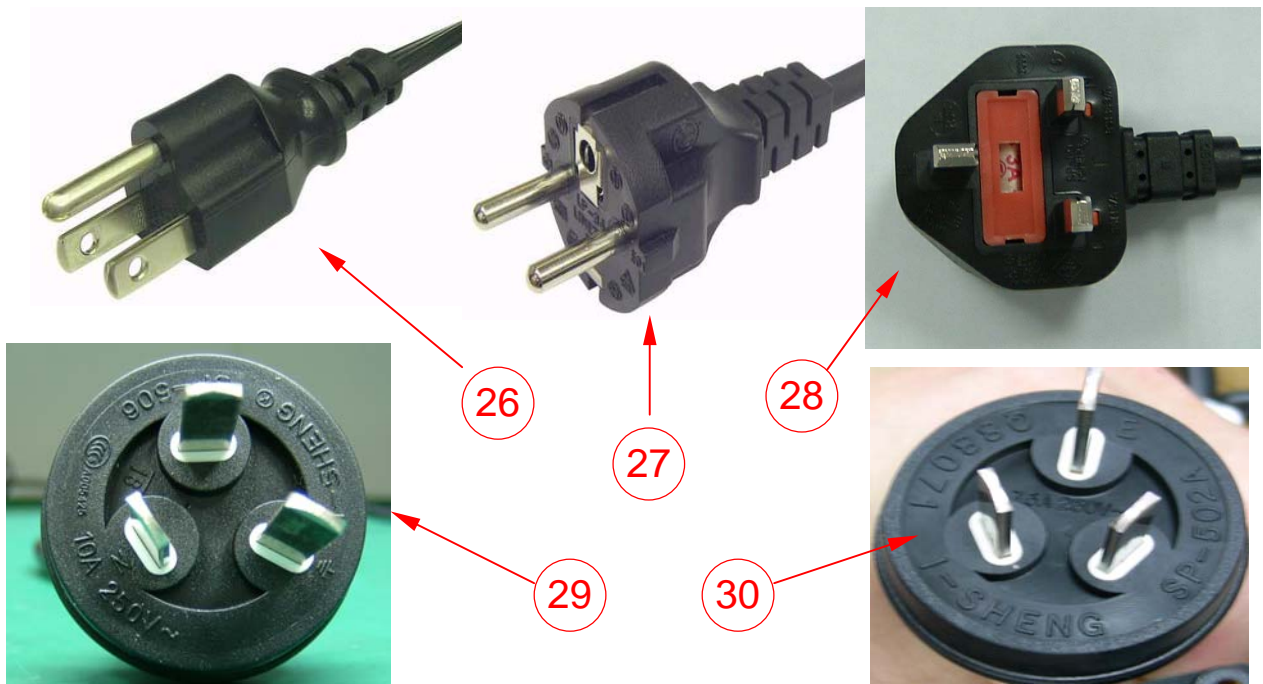
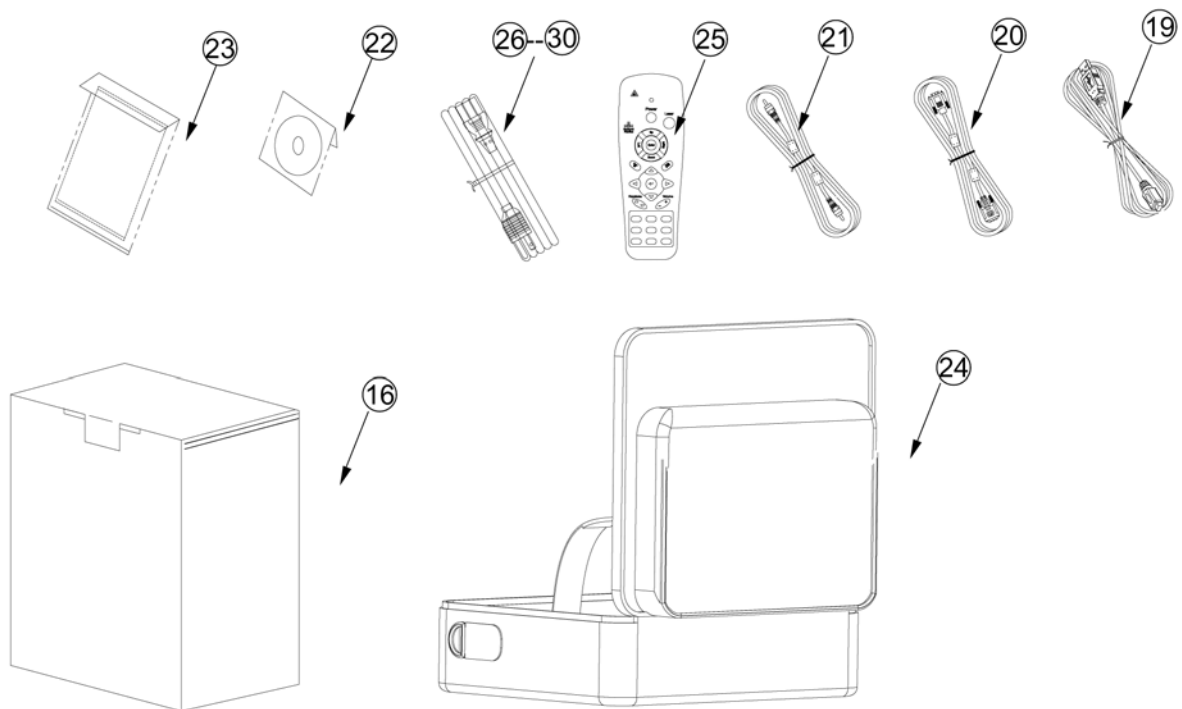
TYPE	NO	Accessories				Q'ty
Cable	19	CABLE SIGNAL USB USB L2000 IVORY (USB CABLE 2m)		ALL	3080337300	1
Cable	20	CABLE SIGNAL D-SUB D-SUB L2000 BLK (RGB CABLE 2m)		ALL	3080425001	1
Cable	21	CABLE SIGNAL RCA RCA L1800 YEL		ALL	3080301101	1
Cable	26	AC POWER CORD 3P #18*3C L3000 BLK		DP-3635 NOTZG /NOTCG	3072050701	1
	27	AC POWER CORD 3P 3G*0.75mm^2 L3000 BLK E		DP-3635 NOTDC/NOTDG / NOTDI	3090211202	
	28	AC POWER CORD 3P 3G*1.0mm^2 L3000 BLK UK		DP-3635 NOTEG	3090211102	
	29	AC POWER CORD 3P 3G* 1.0mm^2 L3000 BLK C		DP-3635 NOTFG	3090123801	
	30	AC POWER CORD 3P 3G*1.0mm^2 L3000 BLK AU		DP-3635 NOTIG	3090211300	
CD	22	CD SOFTWARE PACKING ASSEMBLY (CD Disc)		ALL	3534017304	1
Manual	23	MANUAL QUICK START GUIDE TROUBLE SHOOTING		ALL	5010054300	1
Case	24	CARRYING CASE PP 330*290*110		ALL	3523018900	1
Remote	25	REMOTE CONTROLLER 27KEYS (27KEY LASER MEDIA IR REMOTE CONTROL UNIT)	WHITE	DP-3635 NOTDC /NOTEG/NOTZG /NOTDG/NOTIG /NOTFG/NOTDI	5041814200	1
			GRAY	DP-3635 NOTCG	5041814400	

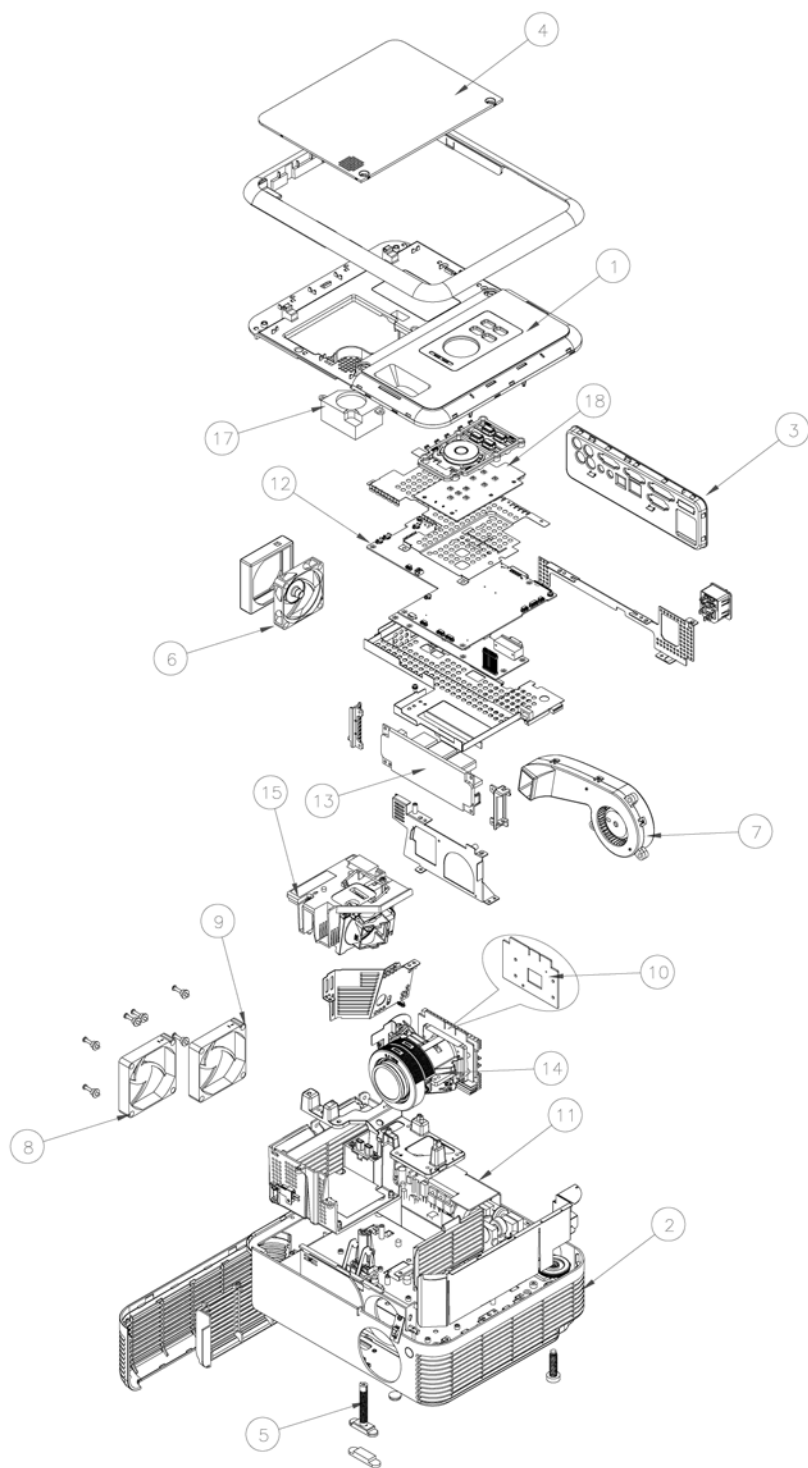
**2. TX774 (DP-3635 NOTCH/ NOTCI)****TX774 Spare part list**

TYPE	NO	DESCRIPTION	Model	P/N	Q'ty
Cover	1	CASE TOP ASSY DP-3622 DUMMY (TOP CASE)	ALL	3398033105	1
Cover	2	CASE BOTTOM ASSY DP-3622 DUMMY (BOTTOM CASE)	ALL	3398033201	1
Cover	3	CASE BACK ASSY PD-3622 DUMMY (BACK CASE)	ALL	3398033000	1
Cover	4	LAMP COVER PC+ABS 94V0 GRAY (LAMP COVER)	ALL	3392040301	1
Foot	5	ADJ FRONT FOOT LEG PC 94V0 GRAY (HEIGHT ADJUSTER)	ALL	3392040201	1
Fan	6	DC FAN ASSY BUB0612HB-SM00 L160/120 60 B	ALL	3620629911	1
Fan	7	DC FAN ASSY NUB0612MB-R00 L35/5 60 B	ALL	3620631711	1
Fan	8	DC FAN ASSY AFB0712HB-SE32 L115/75 70 B	ALL	3620711111	1
Fan	9	DC FAN ASSY AFB0712HB-F00 L55/15 70 B	ALL	3620711211	1
Board	10	DMD BD ASSEMBLY	ALL	5600204372	1
Board	11	POWER BOARD ASSEMBLY	ALL	5600600519	1
Board	12	MAIN BOARD ASSEMBLY	ALL	5600600459	1
Ballast	13	LAMP DRIVER 280W PULSE	ALL	0990076600	1
Optical	14	MODULE 0.7" XGA OPTICAL 280W ASSY	ALL	5811100174	1
Lamp module	15	LAMP MODULE J4P E20.6 280W ASSY	ALL	5811100173	1
Carton	16	CARTON PAPER 434*378*258	ALL	3517129702	1
Speaker	17	SPEAKER ASSEMBLY (80hm 3W 290mm Wire, 51mm*40.6mm*25mm)	ALL	3791001806	1
Keypad	18	KEYPAD BOARD ASSEMBLY (112mm x 65mm x 1.2mm FR-4 )	ALL	5600600271	1

TYPE	NO	Accessories			Q'ty
Cable	19	CABLE SIGNAL USB USB L2000 IVORY (USB CABLE 2m)	ALL	3080337300	1
Cable	20	CABLE SIGNAL D-SUB D-SUB L2000 BLK (RGB CABLE 2m)	ALL	3080425001	1
Cable	21	CABLE SIGNAL RCA RCA L1800 YEL	ALL	3080301101	1
Cable	26	AC POWER CORD 3P #18*3C L3000 BLK	ALL	3072050701	1
CD	22	CD SOFTWARE PACKING ASSEMBLY (CD Disc)	ALL	3534017304	1
Manual	23	MANUAL QUICK START GUIDE TROUBLE SHOOTING	ALL	5010054300	1
Case	24	CARRYING CASE PP 330*290*110	ALL	3523018900	1
Remote	25	REMOTE CONTROLLER 27KEYS DP-3622 JOTCH (27KEY LASER MEDIA IR REMOTE CONTROL UNIT)	ALL	5041814400	1







## 7-7. Carton

